



New York Metropolitan Transportation Council

NYMTC 2050

Socioeconomic and Demographic (SED) Forecast

Modeling Methodology

Technical Memorandum | Task 3.1

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Disclaimer

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1.0 INTRODUCTION

The New York Metropolitan Transportation Council (NYMTC) is a regional council of governments (COG) that is the metropolitan planning organization (MPO) for New York City, Long Island and the lower Hudson Valley. NYMTC provides a collaborative planning forum to address transportation-related issues, develop regional plans and make decisions on the use of federal transportation funds. Socioeconomic and demographic (SED) forecasts are crucial components in the development of regional transportation plans, air quality conformity analysis and decision-making on the use of these funds. In order to produce the 2050 SED forecasts, NYMTC retained the services of The Louis Berger Group (LBG), in collaboration with the New York City Department of City Planning (DCP), to create population, employment, labor force, and household forecasts for the region at the county level, and to develop a tool that allocates the county-level SED projections down to the Transportation Analysis Zone (TAZ) level.

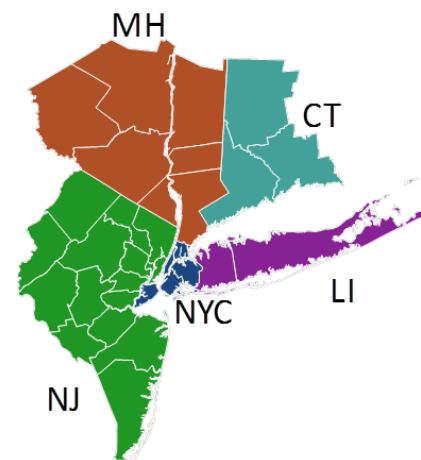
This technical memorandum documents details of the proposed methodology employed by the Project Team (LBG and DCP) to generate the county-level SED forecasts for the 31 counties in the New York metropolitan area that delineate the operating boundary of the New York Best Practices Model (NYBPM) as shown in Figure 1-1. This technical memorandum follows the Task 2.3 memorandum: the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* that provides the historical context and basis for some of the modeling assumptions presented in this document. The Task 4 memorandum builds upon this document and presents and discusses the resulting forecast outputs in the context of input assumptions.

Figure 1-1 shows the segmentation of the 31-County Forecast Region into five distinct subregions and provides a geographic description of the counties comprising each of the five subregions:

- New York City (NYC)
- Long Island (LI)
- Mid-Hudson (MH)
- New Jersey (NJ)
- Connecticut (CT)

FIGURE 1-1. NYMTC REGION & SUB-REGIONAL GEOGRAPHY

New York City	Long Island	Mid-Hudson	New Jersey	Connecticut
Bronx	Nassau	Dutchess	Bergen	Fairfield
Kings	Suffolk	Orange	Essex	Litchfield
New York		Putnam	Hudson	New Haven
Queens		Rockland	Hunterdon	
Richmond		Sullivan	Mercer	
		Ulster	Middlesex	
		Westchester	Monmouth	
			Morris	
			Ocean	
			Passaic	
			Somerset	
			Sussex	
			Union	
			Warren	



The broad categorization of variables generated through this SED forecasting process is listed below with additional detail and description provided in the various SED forecast modules used to generate these outputs.

- Employment Forecasts
 - Payroll & proprietors
- Population Forecasts
 - Total population
 - Population in households
 - Population in group quarters
- Labor Force Forecasts
 - Total civilian labor force
 - Employed civilian labor force
- Household Forecasts
 - Households
 - Average Household Size

1.1 Overview of Forecasting Process

The 2050 SED forecasting process takes a regional perspective on both population and employment growth. Figure 1-2 provides a high-level summary of the general forecasting process and relationships between the four variable outputs – population, employment, labor force, and households – (blue text in Figure 1-2). Although each of the four variables will be discussed separately in more detail, the following is a brief summary description of each element depicted in Figure 1-2.

Population forecasts were generated using a disaggregated cohort component forecasting approach that accounts for changes in population through the application of age specific rates of both natural increase (births and deaths) and net migration. Age-specific rates of natural increase were derived from historical (1990-2010) vital statistics records obtained from the various state departments of health while rates of net migration are obtained from a survival analysis conducted over the same 1990-2010 historical time period.

To account for potential housing constraints in the densely developed New York City subregion, an extensive land use analysis was incorporated into the county level forecasting process for the five New York City Boroughs. This land use analysis was used to adjust the population projections generated from the cohort component model in recognition of capacity constraints to population settlement in the City.

Employment forecasts were generated from a set of national and regional employment forecasts obtained from different third party sources, including Global Insight and Moody's. A range of alternative county level employment forecasts (by industry) were developed by applying different shift-share ratios implied by various combinations of national and regional employment scenarios described by the third party sources. Final employment estimates were ultimately derived by applying a forecast averaging approach to the resulting spread of outcomes.

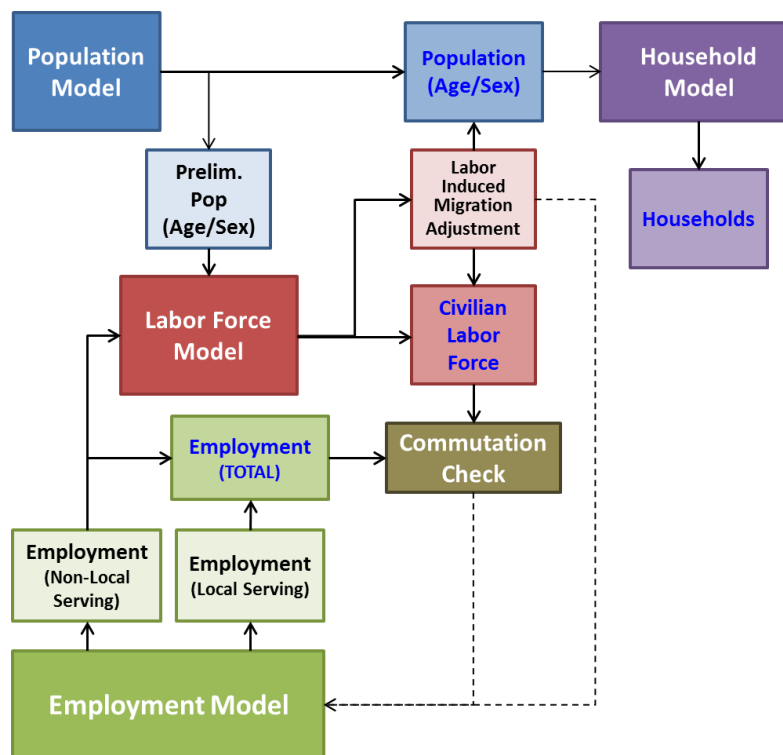
Although Figure 1-2 shows that labor force estimates are an intermediate input in the population forecast process, both labor force and household forecasts are ultimately products of the population forecast. Both forecasts are generated by applying age-specific labor force participation and household formation (headship) rates to the age/sex profiles obtained from the population forecast.

For each five-year interval in the 2010-2050 forecast horizon, initial forecasts of both future population and employment change were first generated by the respective models. The regional labor demand

implied by the employment forecast for basic (i.e. non-local serving) industries, was evaluated against corresponding regional labor supply implied by the preliminary population projections, and any imbalances between the two were addressed through a labor induced migration adjustment to the population forecast. The balance between labor supply and demand, and the resulting labor induced migration adjustments accounted for the land use constraints in the five New York City Boroughs and economic migrants that could not be housed in New York City were allocated to the surrounding counties in proportion of observed commuting patterns.

The resulting final migration rates and/or commutation flows (implied by the geographical distribution of employment and labor force) were used to evaluate the reasonability of the employment forecasts and to suggest refinements as necessary.

FIGURE 1-2. SED FORECASTING PROCESS OVERVIEW



The economic-demographic link between population and employment forecasts via the labor force reconciliation is very similar in many respects to the approach used by the New Jersey Department of Labor.¹ A crucial benefit of the economic-demographic model as briefly described above and detailed further in the individual sections of this document, is that this approach ensures a greater consistency between projected population and employment growth.

1.1.1 Roles and Responsibilities

In order to maximize resources in terms of available data and on-the ground intelligence related to the critical land use and capacity issues facing the New York City, the New York City Department of City Planning (DCP) developed population forecasts for the five NYC boroughs, while Louis Berger developed forecasts for the remaining 26 counties.

Table 1-1 summarizes the responsibilities of both the LBG and DCP teams in generating the SED forecast variables listed above. For variables other than employment and labor force, DCP will ultimately be responsible for producing forecasts for the five boroughs comprising New York City, while the LBG Team will prepare population forecasts for the remaining 26-County Forecast Region excluding New York City. The LBG Team is responsible for producing a region-wide employment forecast for all 31 counties, and corresponding estimates of labor force. The responsibilities of each of the two different Teams follow:

TABLE 1-1. SUMMARY OF LBG & DCP RESPONSIBILITIES IN SED FORECASTING PROCESS

Geography	LBG Team	DCP
5 NYC Counties: New York, Kings, Queens, Bronx, Richmond	• Employment Forecasts • Labor Force Forecasts	• Population Forecasts • Household Forecasts
Other New York Counties: Nassau, Suffolk, Westchester, Rockland, Putnam, Orange, Dutchess, Sullivan, Ulster	• Population Forecasts • Household Forecasts • Labor Force Forecasts • Employment Forecasts	N/A
NJ & CT Counties: Bergen, Passaic, Hudson, Essex, Union, Morris, Somerset, Middlesex, Monmouth, Ocean, Hunterdon, Warren, Sussex, Mercer, Fairfield, New Haven, and Litchfield	• Population Forecasts • Household Forecasts • Labor Force Forecasts • Employment Forecasts	N/A

1.1.2 Key Differences of Approaches

Both NYC and 31-County Forecast Region approaches are similar in a lot of respects. However, there are some notable differences given the challenges of data availability and uniformity across all regions, as well as the unique character and conditions within NYC. Table 1-2 summarizes the key methodological differences and more detailed discussions of differences will be addressed in the relevant sub-model sections of this paper.

TABLE 1-2. SUMMARY OF KEY DIFFERENCES IN NYC/OUTSIDE NYC FORECASTING PROCESSES

Model	NYC	26-County	Key Differences
Population	Pure Demographic Cohort-Component with land use component	Demographic-Economic based Cohort-Component	Both the NYC and 31-County population forecasts will use a CC methodology however the 26-County projections will include a labor driven migration component that acts as a bridge between the population and employment models. The NYC forecast also includes an extensive additional land use analysis that will be used to adjust the population projection generated from the CC model.
Employment	Top-down allocation of national employment projections using shift-share methods		N/A
Household	Average household size applied to forecasted population	Household formation based on age-specific headship rates	The NYC method will hold average household size constant, and apply them to the forecasted population to derive households. The 31-County, age-specific headship rates will be applied to the population to forecast household formation.
Labor Force	Labor force participation ratios applied to the projected populations to produce the resident labor force		N/A

1.2 Organization of the Document

The following sections of this document further describe the methodological approaches summarized above by providing additional details associated with each broad forecasting component/module listed below.

- Employment Model
- Population Model
- Labor Force Model
- Household Model

2.0 EMPLOYMENT MODEL

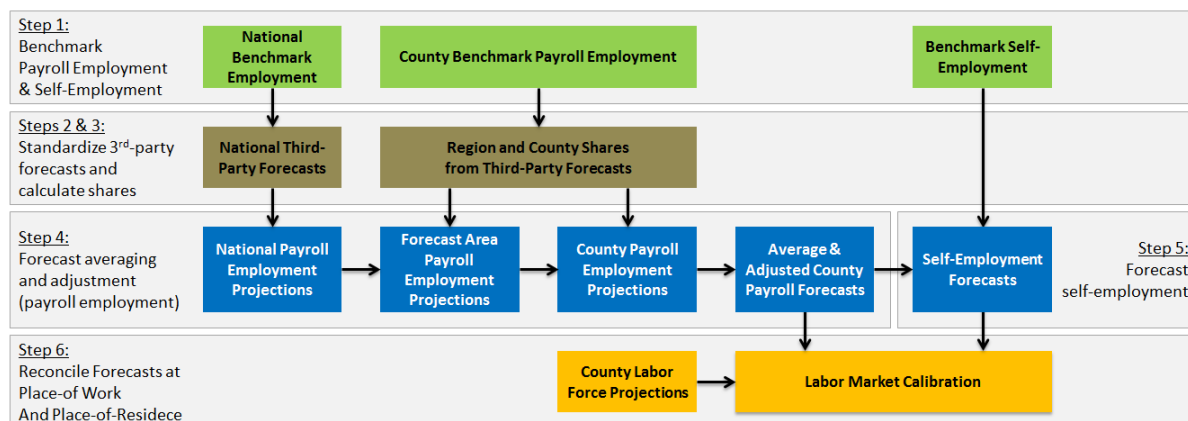
2.1 Introduction

This section outlines the technical methodology used to develop employment projections. At the most basic level, the forecasts are developed using an averaging process that combines independently-developed forecasts from IHS-Global Insight, Moody's, and the Bureau of Labor Statistics (BLS). The methodology was selected for accuracy, and it follows the guidance of Armstrong (2001)². In his words:

"Compared to the typical component forecast, the combined forecast is never less accurate. Usually it is much more accurate, with error reductions in the Mean Average Percent Error (MAPE) running over 12% for the 30 comparisons reviewed. Under ideal conditions (high uncertainty and combining many valid forecasts), the error reductions sometimes exceeded 20%. Also under ideal conditions, the combined forecasts were often more accurate than the best of the components. In short, the combined forecast can be better than the best but no worse than the average." (p. 435)

Figure 2-1 provides an overview of the Employment forecasting methodology, with arrows showing the flow of data through the process. The methodology breaks down to six distinct modeling steps.

FIGURE 2-1. OVERVIEW OF EMPLOYMENT FORECASTING METHODOLOGY



1. **Benchmarking** – this first step combines a number of public data sources to produce the most likely estimate of historical place-of-work employment by 2-digit NAICS industry sector and class of worker (wage & salary vs. self-employed).
2. **Standardizing Third-Party Forecasts** – this step normalizes forecasts from BLS, Moody's, and IHS-Global Insight to the relevant benchmark series.
3. **Calculate Third-Party Shares** – for wage & salary employment by industry, this step calculates third-party forecast shares at the 31-County Region and individual county levels.
4. **Forecast Averaging and Adjustment** – for wage & salary employment by industry, this step estimates future employment for all combinations of national employment and region/county shares (from previous step). This process yields a distribution of 12 employment forecasts for each future year. The "final" scenario forecast is selected as the average of the resulting distribution, with adjustments applied as necessary based on feedback from stakeholders.

5. **Self-Employment** – forecasted wage & salary employment (from previous step) is used to estimate self-employment, based on current self-employment rates for each industry and county.
6. **Reconciliation** – Applies final adjustments to normalize region totals for employment by place of work and place of residence. These factors include unemployment rate, in-commuting and out-commuting, and multiple job-holding rate. Finally, county-to-county journey-to-work flows are balanced and compared to Journey to Work (JTW) trends from 1990-2010.

Each of these steps is described in further detail below. Before proceeding, however, the remainder of this section outlines definitions relating to the employment forecasts. All employment forecasts developed by the methodology described below fall into specific class-of-worker and industry categories. At the class-of-worker level, forecasts are developed for two mutually-exclusive categories: (1) wage & salary employment, and (2) self-employed and unpaid family workers. At the industry level, forecasts are developed for each 2-digit sector of the Census Bureau's North American Industry Classification System (NAICS).³

2.1.1 Employment Category Definitions

Wage & Salary Employment: defined as filled full or part-time positions (by place of work) at private, nonprofit, or government establishments. Industry classification is by establishment (not by individual worker).

Self-Employed and Unpaid Family Workers: includes self-employed in incorporated and unincorporated businesses, and unpaid family workers (reported by place of work). Industry classification is by worker.

2.1.2 Industry Sector Definitions

Agriculture (NAICS Code 11): establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.

Mining (NAICS Code 21): establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas.

Utilities (NAICS Code 22): public or private establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal.

Construction (NAICS Code 23): establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems)

Manufacturing (NAICS Code 31-33): establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Wholesale Trade (NAICS Code 42): establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The wholesaling process is an intermediate step in the distribution of merchandise, typically characterized as being organized to sell to other businesses, operating from a warehouse, and having little or no display of merchandise.

Retail Trade (NAICS Code 44-45): establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is

the final step in the distribution of merchandise; retailers are typically organized to sell merchandise in small quantities to the general public.

Transportation & Warehousing (NAICS Code 48-49): public or private establishments providing transportation services of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. The modes of transportation are air, rail, water, road, and pipeline.

Information (NAICS Code 51): establishments engaged in producing and distributing information and cultural products, providing the means to transmit or distribute these products as well as data or communications, and processing data. The main components of this sector are the publishing industries, including software publishing, and both traditional publishing and publishing exclusively on the Internet; the motion picture and sound recording industries; the broadcasting industries, including traditional broadcasting and those broadcasting exclusively over the Internet; the telecommunications industries; Web search portals, data processing industries, and the information services industries.

Finance & Insurance (NAICS Code 52): establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions.

Real Estate, Rental & Leasing (NAICS Code 53): establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets, and establishments providing related services. The major portion of this sector comprises establishments that rent, lease, or otherwise allow the use of their own assets by others. The assets may be tangible, as is the case of real estate and equipment, or intangible, as is the case with patents and trademarks.

Professional, Scientific & Technical (NAICS Code 54): establishments that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; and veterinary services.

Management of Companies & Enterprises (NAICS Code 55): establishments that hold the securities of companies and enterprises for the purpose of owning a controlling interest or influencing management decisions, or that administer, oversee, and manage other establishments.

Administrative, Support, Waste Management (NAICS Code 56): establishments performing routine support activities for the day-to-day operations of other organizations. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

Educational Services (NAICS Code 61): public, private, or nonprofit establishments that provide instruction and training in a wide variety of subjects in facilities such as schools, colleges, universities, and training centers.

Health Care & Social Assistance (NAICS Code 62): public, private, or nonprofit establishments providing health care and/or social assistance for individuals. The services provided by establishments in this sector are delivered by trained professionals, either on-site or in-residence.

Arts, Entertainment & Recreation (NAICS Code 71): establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector

comprises establishments involved in (1) producing, promoting, or participating in live performances, events, or exhibits; (2) preserving and exhibiting objects and sites of historical, cultural, or educational interest; and (3) operating facilities or providing services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

Accommodation & Food Services (NAICS Code 72): establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

Other Services (NAICS Code 81): establishments primarily engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Government (NAICS Code 92): All workers employed by local, state, or federal governments.

2.2 Benchmarking

Benchmarking is the first step in the forecasting process. The purpose of this step is to use all available data sources to estimate the most likely historical values for place-of-work employment by industry at the national and county level. As will be discussed, no single data source provides a complete, unbiased, picture of historical employment, so multiple sources are combined to establish national and county “benchmark” series. The county series is developed so that it aggregates to accepted sources at higher spatial levels, yet is consistent with Journey-to-Work (JTW) county-to-county estimates used in the calibration process.

2.2.1 Benchmark National Wage & Salary Employment

The primary source for benchmark national wage & salary employment is the BLS *Current Employment Statistics* (CES) program. According to BLS, “the CES program, also known as the payroll survey or the establishment survey, is a monthly survey of approximately 144,000 businesses and government agencies representing approximately 554,000 worksites throughout the United States.”⁴ However, there are two small categories of payroll employment – agriculture and private household⁵ workers – that are out of CES scope. Estimates for these categories are therefore taken from the U.S. Census’ *Current Population Survey* (CPS)⁶ – sometimes called the “household survey”. Table 2-1 shows benchmark national wage & salary employment for select years.

2.2.2 Benchmark County Wage & Salary Employment

Benchmarking county employment involved more steps than national employment because of the sampling and non-sampling errors inherent in available sources at the required spatial/industry detail. Therefore, benchmarks were developed using three data sources: the Quarterly Census of Employment and Wages (QCEW), the State and Area Employment (SAE) program, and the American Community Survey (ACS).

Quarterly Census of Employment and Wages (QCEW)⁷. The Quarterly Census of Employment and Wages Program is a cooperative effort involving the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor and the State Employment Security Agencies (SESAs). It serves as a near census of monthly employment and quarterly wage information by 6-digit NAICS industry at the national, State, and county levels. Employment data under the QCEW program represent the number of covered workers who worked during, or received pay for, the pay period including the 12th of the month. Excluded are members of the armed forces, the self-employed, proprietors, domestic workers, unpaid family workers, and railroad workers covered by the railroad unemployment insurance system.⁸

Because it is a “near census”, this source has the unique advantage of being virtually free of sampling error. However, it has four disadvantages that must be addressed for successful incorporation into the county benchmarks. First, it has a slightly narrower scope than State and Area Employment (discussed next), excluding railroad workers and a portion of agricultural, government, and some nonprofit workers. Second, it suppresses data where a specific industry/county view could reveal the details of a single firm. Third, some employment is reported as “unclassifiable” at either the industry or county level. Finally, when compared to survey-gathered estimates, QCEW reveals a “headquartering bias”, meaning that it overstates employment in city centers (where centralized payroll facilities are located) at the expense of outer counties.⁹

TABLE 2-1. ADOPTED NATIONAL BENCHMARK WAGE & SALARY EMPLOYMENT (THOU.)

NAICS Industry	2000	2005	2010	2011	2012	2013
11-Agriculture, Forestry, & Fishing	1,421	1,212	1,353	1,380	1,377	1,310
21-Mining	520	562	655	739	797	815
22-Utilities	601	554	553	553	553	552
23-Construction	6,787	7,336	5,518	5,533	5,646	5,827
31-33-Manufacturing	17,263	14,227	11,528	11,726	11,927	12,006
42-Wholesale Trade	5,933	5,764	5,452	5,543	5,667	5,747
44-45-Retail Trade	15,280	15,280	14,440	14,668	14,841	15,077
48-49-Transportation & Warehousing	4,410	4,361	4,191	4,302	4,416	4,495
51-Information	3,630	3,061	2,707	2,674	2,676	2,685
52-Finance & Insurance	5,773	6,063	5,761	5,769	5,828	5,878
53-Real Estate, Rental & Leasing	2,011	2,134	1,934	1,927	1,955	2,002
54-Professional, Scientific & Technical	6,702	7,025	7,441	7,666	7,892	8,126
55-Mgmt. Of Companies & Enterprises	1,796	1,759	1,872	1,934	2,023	2,092
56-Admin., Support, Waste Mgmt.	8,168	8,170	7,414	7,732	8,016	8,342
61-Educational Services	2,390	2,836	3,155	3,250	3,341	3,349
62-Health Care & Social Assistance	12,857	14,794	16,734	16,979	17,357	17,753
71-Arts, Entertainment & Recreation	1,788	1,892	1,913	1,919	1,969	2,033
72-Accommodation & Food Services	10,074	10,923	11,135	11,434	11,800	12,208
81-Other Services	5,886	6,207	5,998	6,082	6,168	6,187
92-Government	20,790	21,804	22,490	22,086	21,920	21,864
Total - All Industries	134,080	135,963	132,245	133,894	136,169	138,348

Source: Current Employment Statistics; agriculture data (sector 11) from Current Population Survey; Sector 81 includes “Private Household” employment from CPS. All data accessed March 2014.

State and Area Employment (SAE)¹⁰. The State and Area Employment series is a product of the Current Employment Statistics Survey conducted by the Bureau of Labor Statistics. It reports nonagricultural wage & salary employment by state with industry detail. In this survey, employment is defined as

“the total number of persons on establishment payrolls employed full or part time who received pay for any part of the pay period which includes the 12th day of the month. Temporary and intermittent employees are included, as are any workers who are on paid sick leave, on paid holiday, or who work during only part of the specified pay period. Persons on the payroll of more than one establishment are counted in each establishment. Data exclude proprietors, self-

employed, unpaid family or volunteer workers, farm workers, and domestic workers. Persons on layoff the entire pay period, on leave without pay, on strike for the entire period or who have not yet reported for work are not counted as employed. Government employment covers only civilian workers.”¹¹

Even though this source does not publish estimates at the county level, the state estimates have a number of advantages useful for calibrating lower-level employment. First, because it is a product of the CES survey, SAE provides a foundation consistent with the national estimates (discussed in Section 2.2.1) and provides an accurate temporal picture of statewide employment (from employers’ perspective). Second, at the national and state levels, SAE is benchmarked to QCEW for sectors with equivalent scope, but SAE explicitly estimates employment for sectors not covered by QCEW¹². Third, although it is subject to sampling error for lightly-populated industries, it is suppression-free.

American Community Survey (ACS)¹³. The American Community Survey is an ongoing U.S. Census Program that surveys a small sample of the population every year for detailed socioeconomic characteristics. It was originally designed to replace the decennial census “Long Form” survey. However,

“in order to deliver more timely information for all the geographic areas served by the decennial long form, the Census Bureau has designed the ACS as a sample survey using a continuous measurement approach to data collection. A sample of 3 million addresses is drawn from the Census Bureau’s Master Address File (MAF) each year. For geographic areas with populations larger than 65,000, the sample is sufficient to produce reliable estimates based on a year’s worth of responses. However, in order to provide estimates for areas with smaller populations, the sample must be accumulated over a number of years. The Census Bureau is producing 3-year estimates for areas down to populations of 20,000 or more and 5-year estimates for all units of census geography.”¹⁴

The ACS produces two main data products with data starting in 2005: “summary files” that report tabulations for various topics across established geographies (including states and counties), and a “Public Use Microdata Sample” (PUMS) that reports individual survey records for Public Use Microdata Areas (PUMAs). All ACS data used in the county benchmarking process was from the summary files.

ACS has a number of advantages. The primary advantage is its coverage of topics. Across several summary file tables, the ACS provides estimates of labor force participation by age and sex, county-to-county commuting patterns, class of worker by place of work, and NAICS industry by place of work. Moreover, because all estimates are developed from the same survey, the ACS maintains consistency across topics. For example, when ACS journey-to-work (JTW) estimates are summed to place-of-work and place-of-residence totals, these totals are consistent with other ACS summary file estimates for place-of-work and place-of-residence, respectively. Further, because it is survey-based, the ACS provides an unbiased representation of jobs by place-of-work, reporting where a worker *actually* worked as opposed to where his or her payroll was processed.

However, despite the many benefits offered by ACS data, there are several issues that must be well-understood for successful utilization:

- Summary file estimates are suppressed when a 1, 3, or 5 year sample is not sufficiently large relative to a geography’s population.
- Because it is a survey, ACS estimates are subject to random sampling error, meaning that they may be slightly higher or lower than the true value. For most concepts, sampling error is typically around 1%.

- Although ACS, SAE, and QCEW all use standard NAICS industry classification, employment estimates differ for ACS because it assigns NAICS codes based on the activity of *individual jobs*, whereas SAE and QCEW assign NAICS codes based on the activity of *establishments*.
- The ACS place-of-work employment estimates have a smaller “universe” than SAE and QCEW. Specifically, ACS place of work estimates reflect *primary* jobs. That is, for multiple job-holders, ACS only counts a person’s self-defined “primary” job. Further, select place-of-work estimates (most notably, the 2006-2010 Journey-to-Work estimates) exclude workers who were on vacation or unpaid leave at the time of the survey.
- ACS place-of-work employment estimates are reported for 13 distinct industry sectors – a coarser resolution than is available for QCEW and SAE.

Leveraging the strengths of each dataset described above, county benchmarks were developed in a two-step process that (1) used QCEW and SAE to establish state-level benchmarks by industry, and then (2) down-allocated the state benchmarks to counties – primarily using ACS.

In the first step, SAE and QCEW data were used to establish benchmark state wage & salary employment by industry for Connecticut, New Jersey, and New York. Table 2-2, which compares raw QCEW and SAE data for 2012, indicates that most sectors are very close.

TABLE 2-2. COMPARISON OF STATE 2012 WAGE & SALARY EMPLOYMENT FROM QCEW AND SAE

NAICS Industry	Connecticut		New Jersey		New York	
	QCEW	SAE	QCEW	SAE	QCEW	SAE
11-Agriculture, Forestry, & Fishing ¹	5,048	0	11,038	0	23,143	0
21-Mining ¹	554	0	1,248	0	4,656	4,700
22-Utilities ¹	5,930	7,600	13,725	13,800	35,842	36,000
23-Construction ¹	51,580	51,600	129,670	130,400	313,038	314,400
31-33-Manufacturing ¹	165,200	165,100	243,960	245,300	456,734	459,200
42-Wholesale Trade ¹	63,289	63,200	211,833	212,800	333,579	333,600
44-45-Retail Trade ¹	182,164	182,200	441,611	443,600	909,254	912,900
48-49-Transportation & Warehousing ²	40,340	43,000	146,325	151,600	220,630	226,900
51-Information ²	31,205	31,300	77,252	77,300	258,266	259,100
52-Finance & Insurance ²	112,766	114,400	182,135	197,000	496,014	504,400
53-Real Estate, Rental & Leasing ¹	18,744	18,800	52,654	53,000	178,451	179,100
54-Professional, Scientific & Technical ¹	89,474	89,400	277,240	278,700	595,617	597,000
55-Mgmt. Of Companies & Enterprises ¹	30,567	29,100	79,071	80,500	133,994	136,800
56-Administrative, Support, Waste Mgmt. ¹	83,842	83,900	257,083	259,000	435,949	437,300
61-Educational Services ²	55,231	61,600	72,990	93,100	312,629	423,600
62-Health Care & Social Assistance ²	254,483	256,000	509,210	527,200	1,314,479	1,329,800
71-Arts, Entertainment & Recreation ¹	24,806	24,900	55,479	55,600	147,139	148,000
72-Accommodation & Food Services ¹	117,737	117,800	288,451	290,400	652,609	656,000
81-Other Services ²	58,470	61,700	127,275	164,200	335,361	379,700
92-Government ²	235,999	238,500	574,465	616,000	1,372,899	1,458,700
Total - All Industries	1,627,429	1,640,100	3,752,715	3,889,500	8,530,283	8,797,200

Source: BLS QCEW and SAE, accessed March 2014

¹ QCEW used for state benchmarks

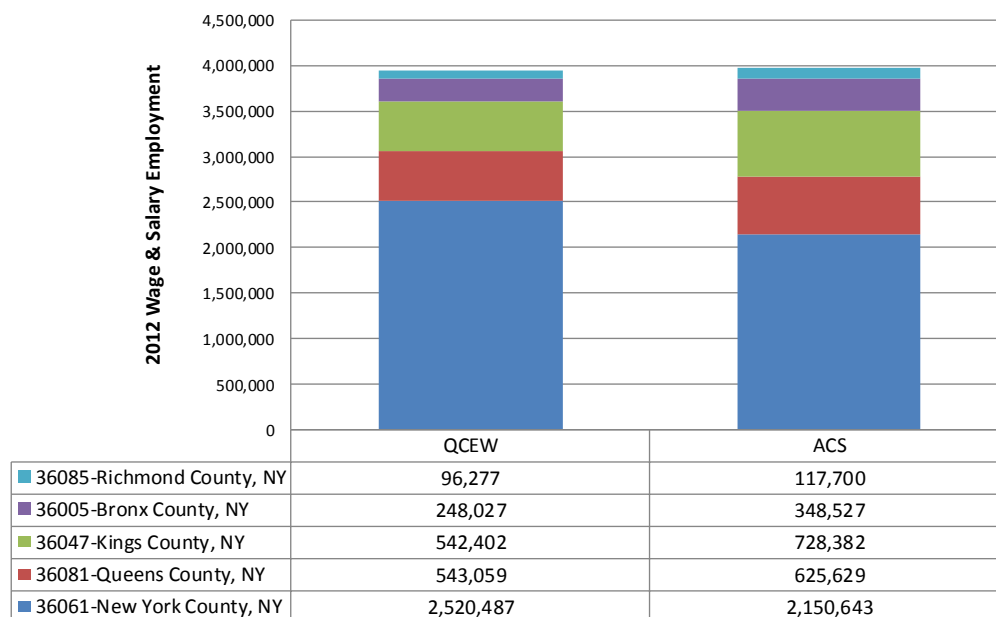
² SAE used for state benchmarks

This is to be expected, since SAE is explicitly benchmarked to QCEW. However, it also shows – for each state – the degree to which SAE augments QCEW data with “non-covered” employment¹⁵. Based on this comparison, state wage & salary employment was benchmarked to QCEW data for all sectors except for those where SAE estimates non-covered employment (NAICS sectors 48-49, 51, 52, 61, 62, 81, and 92).

The next step in developing county wage & salary benchmark employment was to down-allocate the state control totals to counties, by industry. This was done using a combination of ACS and QCEW data. ACS was selected to be the primary source for down-allocation because it is a more accurate reflection of *actual* place of work than QCEW. Although QCEW has procedures to assign employment for establishments with multiple work sites, there remains some “headquartering” bias in the data, overstating employment in counties containing centralized payroll offices. In contrast, ACS assigns employment to place of work based on the answer to the question “at what location did this person work last week?”

This headquartering bias was particularly pronounced for the five NYC boroughs¹⁶. This is demonstrated in Figure 2-2, which shows that QCEW and ACS each estimate almost exactly 4 million jobs in the 5-county region¹⁷. Yet, QCEW’s estimate for Manhattan is almost 400,000 higher than ACS. Thus, QCEW over-represents employment in Manhattan and under-represents it in the other four boroughs (particularly Brooklyn).

FIGURE 2-2. COMPARISON OF 2012 NEW YORK CITY WAGE & SALARY EMPLOYMENT, QCEW vs. ACS



To eliminate this headquartering bias, state control totals were down-allocated to counties using ACS tables Bo8526 and Bo8528, which contain, respectively, place of work employment by industry and by class of worker. Both tables were necessary because the first of these – place of work employment by industry – reports employment totals across all classes of worker, including proprietors, self-employed, and unpaid family workers. Further, in this table, government workers are reported by the NAICS code for the employment activity. For example, public school teachers are reported under NAICS 61 – Education Services.

In order to put ACS employment data on the same definitional footing as SAE/QCEW¹⁸, wage & salary employment had to be separated from proprietors, self-employed, and unpaid family workers, and government workers needed to be consolidated into NAICS 92. This was done by using the two tables described above as control totals for each region, and then the cross-classification was calculated using iterative proportional fitting¹⁹. Here, the matrix was “seeded” using place of residence data, which contained the full cross-classification of industry by class of worker (ACS Table C24070).

Table 2-3 shows the results of this process for New York State, for the ACS 2012 one-year sample. Here, the data in the bottom row comes directly from Table B08528, the data in the far-right column comes directly from Table B08526, and the rest of the cells are estimated using the iterative proportional fitting method (“seeded” with data from ACS Table C24070).

TABLE 2-3. ESTIMATED ACS PLACE OF WORK EMPLOYMENT BY INDUSTRY AND CLASS OF WORKER (NEW YORK STATE, 2012)

Industry	Class of Worker					Total Workers by Industry ²
	Private ³	Proprietor ⁵	Nonprofit ³	Govern-ment ⁴	Self-employed and unpaid family ⁵	
Agriculture & Mining	31,125	4,185	1,102	551	14,733	51,695
Construction	365,696	43,958	9,150	34,655	69,340	522,799
Manufacturing	571,417	16,495	13,398	3,064	11,133	615,506
Wholesale Trade	195,338	18,153	2,857	240	11,003	227,590
Retail Trade	918,518	39,513	14,053	3,858	36,418	1,012,360
Transportation, Warehousing & Util.	280,643	15,334	6,790	121,985	31,395	456,147
Information	222,280	7,314	16,177	14,406	15,215	275,392
Finance, Insurance, & Real Estate	653,502	26,363	39,817	30,427	36,472	786,582
Business Services	813,327	77,276	40,406	34,900	114,934	1,080,843
Education & Health Care	1,039,004	39,425	591,225	714,884	85,289	2,469,826
Entertainment	696,620	29,456	43,748	27,963	47,475	845,262
Other Services	220,355	21,108	132,166	1,920	82,767	458,317
Public Administration	0	0	0	452,608	0	452,608
Total Workers by Class of Worker¹	6,007,825	338,579	910,889	1,441,460	556,174	9,254,927

Note: Non-total cells estimated using iterative proportional fitting with the cells “seeded” using ACS 3-yr sample, Table C2407.

¹ Source: ACS 1-yr sample, Table B08528

² Source: ACS 1-yr sample, Table B08526

³ Columns included in wage & salary estimates by industry

⁴ Column total included in wage & salary employment in Government sector (NAICS 92)

⁵ Columns consolidated into residual “self-employment” estimates by industry

Next, wage & salary employment was calculated as private plus nonprofit workers, with the exception that government wage & salary workers (NAICS 92) were calculated as the sum of the government class of worker. Finally, proprietors and self-employed and unpaid family workers were consolidated into residual “self-employment” by industry.

The iterate proportional fitting technique described above was applied to Connecticut, New Jersey, and New York, plus all 31 counties in the NYMT forecast area using all available 1-year samples from 2005 through 2012²⁰.

In the next step, industry-specific allocation ratios were developed for each county by dividing county wage & salary employment (as estimated above) by the state totals. These allocation ratios were then multiplied by state benchmark SAE/QCEW employment, aggregated to the 13 ACS industry sectors. This step yielded estimated county wage & salary employment for the 13 ACS sectors.

After SAE/QCEW state totals were allocated to counties, two additional steps were needed to complete the county benchmark series. First, county QCEW²¹ data was used to split ACS's aggregated sectors into full 2-digit NAICS industries. Second, QCEW data was used to extend the benchmark series beyond the ACS sample years. This was done by indexing QCEW employment to the first and last year of the ACS series (2005 and 2012, respectively), and projecting ACS forward (to 2013) and backwards (to 1998) using the QCEW indices. Table 2-4 and Table 2-5 show the resulting benchmark wage & salary employment estimates by industry and county, respectively.

TABLE 2-4. ESTIMATED BENCHMARK WAGE & SALARY EMPLOYMENT BY INDUSTRY FOR THE 31-COUNTY FORECAST AREA

NAICS Industry	2000	2005	2010	2011	2012	2013
11-Agriculture, Forestry, & Fishing	12,151	11,930	16,532	14,595	16,699	21,036
21-Mining	3,383	3,161	2,572	2,646	2,876	4,974
22-Utilities	44,560	39,882	42,624	41,607	42,504	41,876
23-Construction	403,590	405,975	356,694	359,974	367,591	387,361
31-33-Manufacturing	861,689	654,266	529,452	521,882	517,533	513,112
42-Wholesale Trade	493,245	459,345	445,006	437,327	442,044	444,467
44-45-Retail Trade	1,034,145	1,041,698	1,011,207	1,034,410	1,054,277	1,073,623
48-49-Transportation & Warehousing	355,478	326,134	311,343	315,652	309,284	314,365
51-Information	410,155	326,475	291,747	296,130	301,074	300,340
52-Finance & Insurance	703,881	670,455	609,591	626,031	618,599	616,929
53-Real Estate, Rental & Leasing	212,617	217,138	204,272	206,695	205,461	209,821
54-Professional, Scientific & Technical	737,941	699,214	733,323	746,855	775,563	796,780
55-Mgmt. Of Companies & Enterprises	159,670	162,332	176,241	177,630	182,345	188,056
56-Admin., Support, Waste Mgmt.	605,138	581,079	549,371	570,186	590,023	610,214
61-Educational Services	283,341	334,724	386,079	392,507	409,537	426,725
62-Health Care & Social Assistance	1,182,658	1,304,717	1,425,346	1,444,123	1,481,406	1,509,718
71-Arts, Entertainment & Recreation	132,548	146,347	158,073	160,292	170,468	176,059
72-Accommodation & Food Services	532,012	580,409	647,526	675,740	718,259	750,474
81-Other Services	474,888	512,454	507,692	526,638	534,243	539,979
92-Government	1,536,847	1,583,887	1,585,261	1,547,710	1,519,051	1,507,283
Total - All Industries	10,179,937	10,061,622	9,989,951	10,098,630	10,258,838	10,433,191

Source: SAE, ACS, and QCEW

2.2.3 Benchmark Self-Employment

Finally, ACS data was used to establish benchmark self-employment, defined as those self-employed in incorporated and unincorporated businesses, as well as unpaid family workers. Much of the groundwork for this step was laid in the payroll benchmarking process, since self-employment had to be removed from total employment by industry (see previous section). That process established place-of-work self-employment by county for 13 distinct industries (see Table 2-3). Therefore, the only remaining step was to expand the six aggregated sectors into full 2-digit NAICS detail:

- Agriculture & Mining (combines 11 and 21)
- Transportation, Warehousing & Util. (combines 48-49 and 22)
- Finance, Insurance, & Real Estate (combines 52 and 53)
- Business Services (combines 54, 55, and 56)
- Education & Health Care (combines 61 and 62)
- Entertainment (combines 71 and 72)

**TABLE 2-5. ESTIMATED BENCHMARK WAGE & SALARY EMPLOYMENT BY COUNTY
FOR THE 31-COUNTY FORECAST AREA**

County/Subregion	2000	2005	2010	2011	2012	2013
Bronx	316,271	320,838	350,533	363,130	365,105	372,740
Kings	703,485	716,192	730,603	763,082	783,759	804,580
New York	2,393,507	2,216,457	2,286,188	2,281,686	2,319,714	2,371,541
Queens	623,769	636,855	628,064	644,145	660,759	680,999
Richmond	108,626	109,390	115,126	121,190	129,218	131,978
Total - New York City	4,145,658	3,999,732	4,110,515	4,173,233	4,258,555	4,361,837
Nassau	529,747	524,273	529,122	531,478	543,809	548,825
Suffolk	545,332	569,401	567,635	585,855	584,186	592,811
Total - Long Island	1,075,078	1,093,674	1,096,757	1,117,333	1,127,994	1,141,636
Dutchess	108,475	112,973	108,554	108,730	111,624	112,285
Orange	131,369	140,212	139,218	140,374	136,896	138,697
Putnam	22,337	25,073	24,413	25,917	25,582	25,739
Rockland	104,794	109,679	101,744	102,523	107,133	108,264
Sullivan	25,858	26,898	26,023	25,695	24,735	24,401
Ulster	63,834	64,600	60,075	61,149	61,493	61,390
Westchester	409,795	416,049	390,315	397,683	410,628	412,245
Total - Mid-Hudson	866,461	895,483	850,342	862,071	878,091	883,021
Bergen	457,670	448,038	412,477	416,133	424,198	431,064
Essex	397,785	389,272	372,692	362,216	361,769	359,174
Hudson	280,344	272,842	268,943	275,626	274,478	279,227
Hunterdon	53,014	56,349	54,466	54,084	53,615	54,881
Mercer	230,379	241,883	232,877	233,675	235,685	239,254
Middlesex	392,319	384,988	375,817	395,042	386,535	392,397
Monmouth	244,500	263,165	261,528	265,704	259,787	261,555
Morris	295,139	297,752	282,198	276,899	290,935	297,572
Ocean	144,519	162,209	161,616	152,675	161,271	165,561
Passaic	192,585	187,550	175,120	174,794	183,006	183,425
Somerset	178,191	173,858	173,959	177,304	182,903	190,973
Sussex	37,213	44,200	41,378	42,321	41,445	42,340
Union	241,407	230,889	231,382	223,791	234,947	238,015
Warren	34,744	38,926	35,411	36,181	35,304	35,682
Total - New Jersey	3,179,811	3,191,920	3,079,863	3,086,445	3,125,878	3,171,119
Fairfield	458,322	436,887	424,329	431,646	440,801	446,133
Litchfield	68,595	64,583	56,826	60,373	59,826	59,581
New Haven	386,012	379,344	371,318	367,530	367,693	369,864
Total - Connecticut	912,929	880,813	852,473	859,549	868,320	875,577
Total - 31-County Region	10,179,937	10,061,622	9,989,951	10,098,630	10,258,838	10,433,191

Source: SAE, ACS, and QCEW

These sectors were split using ACS table B24070, which reports place-of-residence employment by class of worker and full two-digit NAICS detail. This data was compiled to the 31-County Region (to minimize random error and bias from in- and out-commuting), and splits were estimated for the aggregated sectors listed above. These region-wide splits were then applied to the county-level data. Table 2-6 and Table 2-7 show the resulting benchmark self-employment estimates by industry and county, respectively.

TABLE 2-6. BENCHMARK SELF-EMPLOYMENT BY INDUSTRY, 31-COUNTY REGION

NAICS Industry	2005	2006	2007	2008	2009	2010	2011	2010
11-Ag., Forestry, & Fishing	9,111	7,598	7,379	5,479	6,382	6,727	6,901	6,277
21-Mining	235	196	191	142	165	174	178	162
22-Utilities	0	0	0	0	0	0	0	0
23-Construction	157,178	157,525	172,250	158,295	149,288	152,297	133,531	140,680
31-33-Manufacturing	37,130	35,888	38,874	36,720	30,844	31,820	32,643	33,134
42-Wholesale Trade	44,469	40,792	42,389	37,933	35,016	34,862	31,504	37,788
44-45-Retail Trade	103,345	110,186	103,735	105,841	96,387	84,176	92,231	91,136
48-49-Transp. & Warehousing	47,296	55,609	59,349	54,297	54,890	59,889	57,200	61,672
51-Information	28,305	24,548	23,913	24,538	24,048	23,046	21,110	23,344
52-Finance & Insurance	34,911	34,502	34,885	31,826	29,465	28,518	29,738	27,818
53-Real Estate, Rental & Leasing	47,654	47,096	47,619	43,443	40,221	38,928	40,593	37,973
54-Prof., Scientific & Tech.	168,972	167,022	171,433	166,283	163,050	161,863	167,292	168,776
55-Mgmt. Of Companies	300	297	305	295	290	288	297	300
56-Admin., Suppt., Waste Mgmt.	60,983	60,279	61,871	60,012	58,845	58,417	60,376	60,912
61-Educational Services	24,366	23,743	24,037	24,090	25,018	24,953	24,995	25,566
62-Health Care & Soc. Assistance	120,568	117,484	118,942	119,203	123,791	123,472	123,679	126,506
71-Arts, Entertainment & Rec,	59,620	56,770	54,582	61,951	59,640	55,808	55,582	57,069
72-Accommodation & Food Svcs.	41,976	39,970	38,429	43,617	41,990	39,292	39,133	40,180
81-Other Services	89,981	108,648	106,838	106,462	112,178	111,525	112,437	115,894
92-Government	0	0	0	0	0	0	0	0
Total - All Industries	1,076,402	1,088,154	1,107,019	1,080,428	1,051,508	1,036,056	1,029,420	1,055,186

TABLE 2-7. BENCHMARK SELF-EMPLOYMENT BY COUNTY, ALL INDUSTRIES COMBINED

County/Subregion	2005	2006	2007	2008	2009	2010	2011	2012
Bronx	31,621	34,740	36,359	37,390	32,934	30,383	33,367	31,337
Kings	81,785	79,958	86,890	84,106	95,117	93,135	99,117	96,106
New York	203,652	207,982	222,310	218,034	199,709	203,307	198,215	207,781
Queens	79,104	78,444	76,884	80,496	82,174	81,032	68,022	79,707
Richmond	12,655	14,217	13,211	15,582	13,292	11,271	11,113	10,946
Total - New York City	408,817	415,341	435,654	435,608	423,226	419,128	409,834	425,877
Nassau	69,973	69,837	70,380	65,431	64,969	61,880	63,602	67,607
Suffolk	73,198	71,099	72,603	73,125	67,869	69,244	71,767	66,664
Total - Long Island	143,171	140,936	142,983	138,556	132,838	131,124	135,369	134,271
Dutchess	12,228	12,800	13,503	14,498	13,057	12,846	12,802	12,342
Orange	13,474	16,490	11,501	15,125	16,661	11,764	13,386	14,493
Putnam	3,946	4,162	4,053	4,129	4,179	4,042	3,764	3,932
Rockland	13,823	13,854	14,074	13,801	14,034	14,869	12,887	13,018
Sullivan	3,842	4,095	4,001	3,925	3,761	3,569	3,331	3,169
Ulster	10,584	11,254	10,986	11,002	10,396	10,681	9,446	9,131
Westchester	55,341	52,227	53,860	50,881	51,227	54,873	50,199	53,648
Total - Mid-Hudson	113,238	114,883	111,979	113,362	113,315	112,644	105,815	109,733
Bergen	48,831	51,166	50,940	45,092	47,271	43,015	46,298	49,479
Essex	33,702	35,490	31,005	31,109	28,644	29,803	31,279	28,412
Hudson	21,499	23,266	23,837	18,144	21,392	20,969	19,939	19,823
Hunterdon	7,105	7,368	7,413	7,178	6,783	6,186	5,946	7,455
Mercer	16,109	16,654	13,566	16,907	16,396	15,181	14,841	13,709
Middlesex	26,297	27,920	28,251	25,254	23,810	24,252	24,369	26,514
Monmouth	35,022	32,154	31,847	30,219	31,365	26,879	28,281	29,653
Morris	28,002	26,666	27,611	25,384	24,361	25,085	24,910	26,233
Ocean	18,895	22,392	21,656	20,916	20,154	19,797	17,394	23,600
Passaic	17,574	17,467	18,783	17,378	15,371	16,629	16,041	17,583
Somerset	14,395	15,210	14,995	14,271	14,146	14,933	13,266	15,486
Sussex	7,262	7,515	7,559	6,938	6,885	6,913	5,759	6,481
Union	20,852	24,428	23,637	22,560	22,602	19,288	20,209	18,413
Warren	4,484	4,657	4,653	4,649	4,491	4,021	3,672	4,177
Total - New Jersey	300,029	312,353	305,753	285,999	283,671	272,952	272,204	287,018
Fairfield	61,613	59,837	63,382	60,136	51,660	56,537	60,396	52,514
Litchfield	12,266	11,278	12,431	10,716	10,326	11,609	11,398	12,950
New Haven	37,268	33,526	34,837	36,051	36,472	32,062	34,403	32,823
Total - Connecticut	111,147	104,641	110,650	106,903	98,458	100,208	106,197	98,287
Total - 31-County Region	1,076,402	1,088,154	1,107,019	1,080,428	1,051,508	1,036,056	1,029,420	1,055,186

2.2.4 Labor Market Reconciliation

Figure 2-3 (next page) brings the benchmark wage & salary and self-employment series together to validate the spatial distribution of total employment. This figure shows New York City data for the 5-year period 2006-2010, which is the 5-year sample for which the most recent Journey-to-Work (JTW) data is available. In practice, the data shown in Figure 2-3 was developed for all 31 counties.

The block of data in the upper-left of Figure 2-3 is raw JTW data. The data at the upper-right is ACS place-of-residence data for tables B08007 and B23001. The data at the lower-left is ACS place-of-work

data for table B08528 and several other sources of employment data, including raw QCEW, raw Longitudinal Employer-Household Dynamics (LEHD) data, and the benchmark wage & salary series (developed as described above). All JTW and ACS data is from the 2006-2010 5-year sample, and QCEW, LEHD, and benchmark employment estimates are shown as the average over the same 5-year period.

The first thing to note in Figure 2-3 is that JTW reconciles perfectly with ACS summary file tables across both the place-of-residence and place-of-work dimension. In the case of place-of residence, commuters on vacation or sick leave can be calculated as the difference between JTW totals and totals from table B23001 (this is shown as the far-right column).

Figure 2-3 also demonstrates the headquartering bias in QCEW. The raw QCEW data suggests that 64.4 percent of NYC wage & salary employment is located in Manhattan and that (for example) 13.7 percent is located in Queens. The ACS tells a different story, however, suggesting that only 55.3 percent is located in Manhattan (or, more accurately, when Census asked NYC survey respondents, “where did you work last week?”, only 55.3 percent said Manhattan).

Note that the LEHD data fixes some of the headquartering bias, moving some jobs from Manhattan to Brooklyn. However, the resulting estimates still differ substantially versus JTW, with Queens LEHD still lower than ACS by over 100 thousand jobs.

In contrast, the benchmark wage & salary employment series yields a spatial distribution almost identical to ACS (but recall that it also aggregates to state SAE benchmarks). Moreover, the bottom three rows show the multiple job-holding rate implied by the benchmark series (as compared to ACS primary jobs). The resulting rates are highly consistent with state-level estimates from the Current Population Survey²².

FIGURE 2-3. BENCHMARK EMPLOYMENT RECONCILIATION AND COMPARISON TO RAW SOURCES (NEW YORK CITY COUNTIES, 2006-2010 5-YEAR SAMPLE)

ACS Journey to Work 5-year sample 2006-2010									ACS Table B08007			ACS Table B23001					Primary Jobs Out of JTW Universe (sick, on vacation, or on leave)									
Place of Res.							Place of Work					Total Primary Jobs	Worked in state of residence:	Worked in county of residence	Total Labor Force	Unemployed Persons			Civilian Employed	Armed Forces	Total Employed					
	Manhattan	Brooklyn	Queens	Bronx	Staten Island	Rest of US	Totals																			
	Manhattan	696,081	23,906	20,087	27,179	1,421	58,323	826,997	826,997	787,729	696,081						921,446	72,936				848,016	494	848,510	21,513	2.5%
	Brooklyn	391,008	533,683	69,681	13,534	6,696	45,706	1,060,308	1,060,308	1,033,785	533,683						1,187,277	99,804				1,086,160	1,313	1,087,473	27,165	2.5%
	Queens	370,243	84,984	430,249	21,038	2,078	122,495	1,031,087	1,031,087	1,008,878	430,249						1,165,731	99,001				1,065,977	753	1,066,730	35,643	3.3%
	Bronx	191,620	19,959	21,564	226,315	617	58,864	518,939	518,939	504,282	226,315						611,802	73,850				537,067	885	537,952	19,013	3.5%
	Staten Island	52,940	29,969	5,698	1,580	95,778	18,109	204,074	204,074	188,287	95,778						222,151	13,631				207,886	634	208,520	4,446	2.1%
	Rest of US	624,862	71,502	130,740	69,991	15,356		912,451																		
	Totals	2,326,754	764,003	678,019	359,637	121,946	303,497	4,553,856	3,641,405	3,522,961	1,982,106						4,108,407	359,222				3,745,106	4,079	3,749,185	107,780	2.9%

ACS Table B08528	Total Primary Jobs	2,326,754	764,003	678,019	359,637	121,946	4,250,359
	Employee of private company	1,665,542	440,325	421,261	197,723	70,404	2,795,255
	Self-employed in own incorporated business	74,634	29,293	30,360	10,427	5,493	150,207
	Private not-for-profit wage and salary	217,380	70,849	49,742	40,249	12,559	390,779
	Government workers (all NAICS)	241,326	166,625	130,048	88,728	26,311	653,038
	Self-employed & unpaid family workers	127,872	56,911	46,608	22,510	7,179	261,080
	Primary Self-Employment by Place of Work	202,506	86,204	76,968	32,937	12,672	411,287

Compare W&S Sources	ACS Primary Wage & Salary Jobs	2,124,248	677,799	601,051	326,700	109,274	3,839,072
	(% of NYC total)	55.3%	17.7%	15.7%	8.5%	2.8%	100%
	QCEW 2006-2010 Avg.	2,311,280	471,751	490,800	225,589	91,992	3,591,411
	(% of NYC total)	64.4%	13.1%	13.7%	6.3%	2.6%	100%
	LEHD 2006-2010 Avg.	2,043,297	630,979	481,804	217,587	86,901	3,460,568
	(% of NYC total)	59.0%	18.2%	13.9%	6.3%	2.5%	100%
Benchmark 2006-2010 Avg. (SAE/ACS/QCEW)	2,299,647	723,561	642,370	347,833	118,603	4,132,014	
(% of NYC total)	55.7%	17.5%	15.5%	8.4%	2.9%	100%	

Estimated Gross Jobs Using Benchmark	2,502,153	809,765	719,338	380,770	131,275	4,543,301	= Benchmark + ACS Self-Employed
Estimated Total Primary Jobs using ACS	2,375,852	782,620	696,114	369,744	124,336	4,348,665	= ACS Total Primary Jobs plus Primary Jobs out of JTW universe
Derived Multiple Job-Holding Rate	5.3%	3.5%	3.3%	3.0%	5.6%	4.5%	

2.3 Standardizing Third-Party Forecasts

The next step in the forecasting process was to standardize the third-party employment forecasts to the benchmark wage & salary series. The methodology uses three separate third-party forecasts: IHS-Global Insight, Moody's, and Bureau of Labor Statistics (BLS). These are used in two ways. First, all three are used to establish distinct national employment scenarios. Second, IHS-Global Insight and Moody's – which provide employment forecasts at the county level – are used to establish share ratios to the 31-County Forecast Area and individual counties, respectively. The next three sections provide further information about each third-party forecast. As will be discussed, these sources have variations in scope and data collection methods that result in minor differences in their historical estimates. Therefore, before they can be used, each third-party forecast must be standardized to the national and county benchmark series for a single historical year.

2.3.1 IHS-Global Insight

At the national level, IHS-Global Insight produces forecasts of economic activity using an econometric dynamic equilibrium growth model.²³ Among the large array of variables forecasted by this model are GDP growth rates by detailed component and wage & salary employment by 2-digit NAICS sector²⁴. At the sub-national level, IHS-Global Insight produces wage & salary employment forecasts with reduced industry detail, as shown in Table 2-8. Therefore, in the employment forecasting methodology presented below, IHS-Global Insight forecasts are used to establish a national wage & salary employment forecast scenario, as well as establish region and county employment shares, by industry.

TABLE 2-8. DISTINCT INDUSTRY SECTORS FOR IHS-GLOBAL INSIGHT COUNTY FORECASTS

IHS-Global Insight Sector	Corresponding two-digit NAICS Sectors
Construction, Natural Resources, and Mining	11-Agriculture 21-Mining 23-Construction
Manufacturing	31-33-Manufacturing
Transportation, Trade, & Utilities	22-Utilities 42-Wholesale Trade 44-45-Retail Trade 48-49-Transportation & Warehousing
Information	51-Information
Financial Activities	52-Finance & Insurance 53-Real Estate, Rental, & Leasing
Professional & Business Services	54-Professional, Scientific, Technical Services 55-Management of Companies & Enterprises 56-Administrative, Support, & Waste Management
Education & Health Services	61-Educational Services 62-Health Care & Social Assistance
Leisure & Hospitality	71-Arts, Entertainment, & Recreation 72-Accommodation & Food Services
Other Services	81-Other Services
Government	92-Government

2.3.2 *Moody's*

Moody's Analytics develops U.S. economic forecasts that are "simulations of a series of dynamic equations in which regressions are used to estimate coefficients based on historical relationships. The model's core equations are a small set of variables that drive the rest of the model. The core variables include (1) final demand, (2) monetary policy, (3) prices, (4) trade, and (5) labor market conditions."²⁵

Moody's is used in the same manner as IHS-Global Insight: to establish a national wage & salary employment scenario, and to establish region and county employment shares. Moody's provides full 2-digit NAICS detail at the county level.

2.3.3 *Bureau of Labor Statistics*

Finally, the Bureau of Labor Statistics (BLS) develops a ten-year U.S. macroeconomic forecast with the objective of developing "a reasonable picture of the long-term economy that can be used as a framework for the Bureau's more detailed industry output and employment projections."²⁶ As with the two forecasting models describe above, the BLS model operates on a core set of econometric equations relating to BEA's NIPA accounts. However, an important difference is that "the model is explicitly designed to reach a full-employment solution in the target years," which they assume to be reflected in a stable unemployment rate of 5.4%.

As its output, the model produces a ten-year national employment forecast.²⁷ In contrast to the two sources discussed above, the BLS forecast is not year-by-year, but rather a single forecast for the year 2022. Thus, in the current methodology, the BLS forecast is only used to establish an independent national employment forecast.

2.3.4 *Standardizing National Employment Forecasts*

Each of the three sources described above produces national forecasts for wage & salary employment at the two-digit NAICS level. Although all of these forecasts are benchmarked to the BLS Current Employer Statistics survey, differences in measurement, scope, and estimation techniques create minor variations among each source that must be reconciled to put all forecasts on a common foundation.

At the national level, differences among forecast series arise from three sources (

Table 2-9). The first relates to when the series was harvested from the CES database. BLS continually updates its historical series with revisions. While most of these differences are small, a few can be significant.

Table 2-9 reveals that the BLS 10-year projections and IHS-Global Insight projections are likely based on 2012 values that have since been revised. This revision is most significant in the Health Care & Social Assistance sector, for which the revision added nearly 400,000 to baseline employment.

To address these issues, the third-party forecasts were each indexed to a base year. For IHS-Global Insight and Moody's, 2013 was used as the base year, and indexes were developed as the ratio of projected employment to base year employment, by industry, for each future year. For the BLS forecast, 2012 was selected as the base year, and a single index was developed for 2022 employment (by industry).

The last step was to apply the indexed forecasts to the benchmark series. Thus, the indexed IHS-Global Insight and Moody's forecasts were multiplied by 2013 benchmark employment (the far-right column of

Table 2-9). As these two sources only publish forecasts to 2044, employment was linearly extended to 2050. Similarly, the 2022 BLS indices were multiplied by 2012 benchmark employment. Finally, employment forecasts from this source were linearly interpolated between 2012 and 2022, and then linearly projected for to 2050. The resulting 2030 and 2050 national forecasts are shown in Table 2-10.

TABLE 2-9. REPORTED 2012 WAGE & SALARY EMPLOYMENT BY SOURCE (THOU.)

NAICS Industry	Benchmark Series	BLS 10-Year Projections ²	IHS-Global Insight ³	Moody's ⁴
11-Agriculture, Forestry, & Fishing	1,377	1,307	50	2,616
21-Mining	797	801	800	797
22-Utilities	553	554	554	553
23-Construction	5,646	5,641	5,642	5,645
31-33-Manufacturing	11,927	11,919	11,921	11,927
42-Wholesale Trade	5,667	5,673	5,674	5,667
44-45-Retail Trade	14,841	14,875	14,869	14,836
48-49-Transportation & Warehousing	4,416	4,415	4,414	4,415
51-Information	2,676	2,678	2,678	2,676
52-Finance & Insurance	5,828	5,830	5,834	5,828
53-Real Estate, Rental & Leasing	1,955	1,956	1,952	1,955
54-Professional, Scientific & Technical	7,892	7,892	7,892	7,892
55-Management Of Companies & Enterprises	2,023	2,023	2,008	2,024
56-Administrative, Support, Waste Management	8,016	8,015	8,029	8,018
61-Educational Services	3,341	3,347	3,348	3,341
62-Health Care & Social Assistance	17,357	16,972	16,972	17,355
71-Arts, Entertainment & Recreation	1,969	1,965	1,967	1,971
72-Accommodation & Food Services	11,800	11,780	11,781	11,800
81-Other Services	6,168	6,175	5,436	5,692
92-Government	21,920	21,917	21,915	21,918
Total - All Industries	136,169	135,735	133,737	136,926

¹ Source: Current Employer Statistics; agriculture data (sector 11) from Current Population Survey; Sector 81 includes "Private Household" employment from CPS. All data accessed March 2014.

² Source: Bureau of Labor Statistics, "Industry employment and output projections to 2022", December 2013.

³ Source: IHS-Global Insight 30-Year Trend Forecast, February 2014

⁴ Source: Moody's Analytics baseline 30-Year Forecast, accessed March 2014.

TABLE 2-10. STANDARDIZED NATIONAL THIRD-PARTY WAGE & SALARY FORECASTS (THOU.)

NAICS Industry	2030			2050		
	Moody's	Global Insight	BLS	Moody's	Global Insight	BLS
11-Agriculture, Forestry, & Fishing	1,331	1,807	1,389	1,348	1,644	1,482
21-Mining	939	906	1,010	986	884	1,240
22-Utilities	528	402	447	460	347	323
23-Construction	7,240	9,330	8,549	9,838	12,284	11,752
31-33-Manufacturing	10,297	12,013	10,819	8,802	10,949	9,422
42-Wholesale Trade	6,113	6,520	6,484	5,828	6,119	7,351
44-45-Retail Trade	15,981	15,099	16,692	16,890	16,144	18,592
48-49-Transportation & Warehousing	4,634	5,477	4,964	4,845	4,941	5,516
51-Information	2,920	3,403	2,545	3,387	4,461	2,380
52-Finance & Insurance	7,199	5,988	6,730	10,541	6,869	7,733
53-Real Estate, Rental & Leasing	2,044	1,997	2,386	2,274	1,946	2,839
54-Professional, Scientific & Technical	9,680	12,174	11,130	13,162	18,951	14,664
55-Mgmt. Of Companies & Enterprises	2,189	1,918	2,061	2,095	1,564	2,025
56-Admin., Support, Waste Mgmt.	13,154	13,341	10,761	18,730	17,777	13,607
61-Educational Services	3,619	2,922	4,609	3,485	3,234	6,092
62-Health Care & Social Assistance	22,562	21,887	23,791	26,935	25,009	27,391
71-Arts, Entertainment & Recreation	2,412	2,223	2,325	2,587	3,012	2,668
72-Accommodation & Food Services	15,725	13,141	13,458	21,994	14,749	14,927
81-Other Services	6,707	6,230	7,377	7,134	6,739	8,777
92-Government	24,289	24,935	22,955	27,692	27,298	24,238
Total - All Industries	159,562	161,712	160,482	189,013	184,917	183,017

2.3.5 Standardizing County Employment Forecasts

Moody's and IHS-Global Insight county forecasts are both developed using QCEW and CES data such that county forecasts are based primarily on QCEW, yet aggregate to state and CES benchmarks by industry. Because of this, both third-party forecasts are subject to the headquartering bias observed in the QCEW data (see section 2.2.2). Further, differences in data collection and suppression-filling techniques lead to minor variations between the two sources. Differences between sources at the county level for the year 2012 are shown in Table 2-11.

Third-party County forecasts were standardized in the same manner as with national forecasts. That is, each forecast was indexed to the most recent historical year (2013), and these indexes were applied to the benchmark employment estimate for that year. Indices for Moody's were developed for all 20 NAICS sectors. However, indices for IHS-Global Insight were only developed for the 10 aggregated sectors shown in Table 2-8. For these aggregated sectors, the observed 2013 split was applied to all forecast years. Finally, both indexed series were linearly extrapolated from 2044 to 2050. Table 2-12 shows the final standardized forecasts used to calculate region and county shares. Table 2-13 shows standardized forecasts by industry for the 31-County Region, and Table 2-14 shows the forecasts for Manhattan. Note that in practice, the data shown in Table 2-14 is developed for all 31 counties for each forecast year.

TABLE 2-11. COMPARISON OF RAW THIRD-PARTY 2012 WAGE & SALARY EMPLOYMENT TO BENCHMARK

County/Subregion	Benchmark	Raw IHS-Global Insight	Raw Moody's
Bronx	365,105	244,225	244,450
Kings	783,759	536,998	538,758
New York	2,319,714	2,465,714	2,465,923
Queens	660,759	538,585	539,818
Richmond	129,218	95,437	95,734
Total - New York City	4,258,555	3,880,960	3,884,683
Nassau	543,809	616,141	615,775
Suffolk	584,186	645,917	645,826
Total - Long Island	1,127,994	1,262,058	1,261,600
Dutchess	111,624	114,796	115,403
Orange	136,896	136,446	137,122
Putnam	25,582	25,277	25,707
Rockland	107,133	118,936	120,103
Sullivan	24,735	26,466	26,555
Ulster	61,493	60,317	60,544
Westchester	410,628	419,984	425,590
Total - Mid-Hudson	878,091	902,223	911,024
Bergen	424,198	451,157	446,444
Essex	361,769	356,317	356,176
Hudson	274,478	246,349	243,537
Hunterdon	53,615	48,931	50,542
Mercer	235,685	243,475	243,297
Middlesex	386,535	407,046	405,821
Monmouth	259,787	256,054	257,235
Morris	290,935	286,747	286,989
Ocean	161,271	157,617	157,544
Passaic	183,006	179,386	177,697
Somerset	182,903	181,692	181,672
Sussex	41,445	39,667	39,775
Union	234,947	231,007	230,674
Warren	35,304	36,245	37,490
Total - New Jersey	3,125,878	3,121,690	3,114,892
Fairfield	440,801	422,954	423,577
Litchfield	59,826	62,795	63,616
New Haven	367,693	367,116	369,012
Total - Connecticut	868,320	852,865	856,204
Total - 31-County Region	10,258,838	10,019,796	10,028,404

TABLE 2-12. STANDARDIZED THIRD-PARTY WAGE & SALARY EMPLOYMENT FORECASTS BY COUNTY

County/Subregion	2013	2030		2050	
	Benchmark	Moody's	Global Insight	Moody's	Global Insight
Bronx	372,740	406,454	412,324	461,458	437,734
Kings	804,580	911,777	854,865	1,075,042	877,800
New York	2,371,541	2,536,187	2,685,076	2,723,759	2,963,171
Queens	680,999	768,117	703,823	895,945	691,660
Richmond	131,978	138,692	149,227	153,091	161,267
Total - New York City	4,361,837	4,761,227	4,805,315	5,309,294	5,131,632
Nassau	548,825	578,553	570,987	633,733	590,991
Suffolk	592,811	621,916	660,135	677,845	712,387
Total - Long Island	1,141,636	1,200,469	1,231,122	1,311,578	1,303,377
Dutchess	112,285	118,483	122,907	124,444	140,000
Orange	138,697	149,920	156,045	165,382	177,737
Putnam	25,739	25,393	26,718	25,480	26,819
Rockland	108,264	124,164	120,218	143,695	130,590
Sullivan	24,401	38,358	26,075	62,130	27,760
Ulster	61,390	60,954	66,975	62,949	72,875
Westchester	412,245	439,904	427,463	476,911	439,471
Total - Mid-Hudson	883,021	957,176	946,402	1,060,990	1,015,250
Bergen	431,064	437,787	472,616	456,861	490,540
Essex	359,174	373,018	367,697	411,388	356,491
Hudson	279,227	310,376	309,652	350,460	311,974
Hunterdon	54,881	51,722	60,483	51,582	66,333
Mercer	239,254	261,388	273,568	298,598	296,675
Middlesex	392,397	439,439	445,429	545,492	482,266
Monmouth	261,555	261,954	278,155	286,337	297,525
Morris	297,572	320,185	337,418	365,029	347,283
Ocean	165,561	179,425	203,861	210,354	238,882
Passaic	183,425	181,130	194,759	182,347	201,442
Somerset	190,973	213,504	225,206	262,681	252,245
Sussex	42,340	41,613	45,720	43,176	46,852
Union	238,015	262,425	250,742	306,293	242,074
Warren	35,682	38,234	41,037	41,887	45,119
Total - New Jersey	3,171,119	3,372,201	3,506,345	3,812,484	3,675,701
Fairfield	446,133	485,812	480,773	550,905	503,143
Litchfield	59,581	64,481	61,416	72,507	60,230
New Haven	369,864	399,459	395,414	444,155	411,791
Total - Connecticut	875,577	949,752	937,603	1,067,567	975,164
Total - 31-County Region	10,433,191	11,240,826	11,426,787	12,561,914	12,101,125

TABLE 2-13. STANDARDIZED THIRD-PARTY WAGE & SALARY EMPLOYMENT BY INDUSTRY (31-COUNTY TOTALS)

NAICS Industry	2013	2030		2050	
	Benchmark	Moody's	Global Insight	Moody's	Global Insight
11-Agriculture, Forestry, & Fishing	21,036	21,176	23,666	20,663	19,741
21-Mining	4,974	11,489	6,473	17,550	5,206
22-Utilities	41,876	31,939	43,276	23,751	42,714
23-Construction	387,361	438,819	484,371	571,415	458,023
31-33-Manufacturing	513,112	423,208	479,080	333,891	417,865
42-Wholesale Trade	444,467	404,332	461,598	366,686	452,373
44-45-Retail Trade	1,073,623	980,182	1,112,700	736,268	1,094,599
48-49-Transportation & Warehousing	314,365	261,298	324,331	218,724	315,230
51-Information	300,340	376,247	358,067	477,929	487,022
52-Finance & Insurance	616,929	655,581	609,798	770,828	607,936
53-Real Estate, Rental & Leasing	209,821	183,648	206,324	143,953	203,770
54-Professional, Scientific & Technical	796,780	839,386	990,976	899,105	1,195,986
55-Mgmt. Of Companies & Enterprises	188,056	177,431	233,201	167,282	282,418
56-Admin., Support, Waste Mgmt.	610,214	829,364	757,206	1,145,543	916,218
61-Educational Services	426,725	455,031	483,763	494,571	534,563
62-Health Care & Social Assistance	1,509,718	1,904,350	1,713,456	2,357,078	1,888,333
71-Arts, Entertainment & Recreation	176,059	176,516	189,973	173,126	216,844
72-Accommodation & Food Services	750,474	882,584	809,407	1,013,476	919,521
81-Other Services	539,979	533,052	529,833	518,906	486,024
92-Government	1,507,283	1,655,193	1,609,287	2,111,170	1,556,739
Total - All Industries	10,433,191	11,240,826	11,426,787	12,561,914	12,101,125

TABLE 2-14. STANDARDIZED THIRD-PARTY WAGE & SALARY EMPLOYMENT BY INDUSTRY (MANHATTAN)

NAICS Industry	2013	2030		2050	
	Benchmark	Moody's	Global Insight	Moody's	Global Insight
11-Agriculture, Forestry, & Fishing	1,255	1,255	2,226	1,255	3,026
21-Mining	215	231	382	252	519
22-Utilities	8,936	6,423	9,293	4,338	9,165
23-Construction	67,712	75,768	120,145	93,029	163,289
31-33-Manufacturing	59,625	44,316	56,350	27,203	48,890
42-Wholesale Trade	73,546	64,159	76,486	60,276	75,427
44-45-Retail Trade	190,715	168,914	198,338	89,686	195,590
48-49-Transportation & Warehousing	36,052	25,191	37,493	12,818	36,974
51-Information	137,358	175,509	164,835	229,453	220,435
52-Finance & Insurance	264,029	269,309	258,806	298,058	250,284
53-Real Estate, Rental & Leasing	73,919	61,207	72,457	41,513	70,071
54-Professional, Scientific & Technical	329,524	348,810	413,792	379,468	489,600
55-Mgmt. Of Companies & Enterprises	60,196	55,922	75,589	53,315	89,437
56-Admin., Support, Waste Mgmt.	143,610	197,645	180,335	277,358	213,373
61-Educational Services	132,813	144,205	153,111	157,199	172,362
62-Health Care & Social Assistance	217,960	281,026	251,271	345,894	282,864
71-Arts, Entertainment & Recreation	52,602	54,136	58,548	47,676	68,793
72-Accommodation & Food Services	185,312	214,748	206,258	222,179	242,352
81-Other Services	122,628	117,277	121,878	96,493	111,865
92-Government	213,534	230,136	227,482	286,296	218,856
Total - All Industries	2,371,541	2,536,187	2,685,076	2,723,759	2,963,171

2.4 Calculate Third-Party Shares

The next step in the forecasting process was to use the indexed third-party forecasts to calculate region and county shares. As will be discussed in the next section, these shares are used in the forecast averaging process – which forms the basis of the final wage & salary employment forecasts.

In this step, region shares were calculated for each third-party forecast on an industry-by-industry basis. That is, they were calculated by dividing forecasted (standardized) wage & salary employment for the 31-County Region by forecasted national employment (by industry for both sources). For example:

Equation 2-1

$$MoodyShare_{y,i}^{Reg} = StdMoodyForecast_{y,i}^{Reg} / StdMoodyForecast_{y,i}^{Nat}$$

y = Subscript denoting year (2014-2050)

i = Industry subscript for each of 20 two-digit NAICS sectors

Reg = superscript denoting data for 31-county Forecast Region

Nat = superscript denoting national data

$StdMoodyForecast$ = Moody's standardized wage & salary employment forecast

This establishes a *Moody's Share* and *Global Insight Share* for each industry at the region level. Similarly, county shares were calculated by dividing standardized county wage & salary employment forecasts by standardized region forecasts (by industry for each source). For example:

Equation 2-2

$$MoodyShare_{y,i}^{Cty} = StdMoodyForecast_{y,i}^{Cty} / StdMoodyForecast_{y,i}^{Reg}$$

y = Subscript denoting year (2014-2050)

i = Industry subscript for each of 20 two-digit NAICS sectors

Cty = superscript denoting county data

Reg = superscript denoting data for 31-county Forecast Region

StdMoodyForecast = Moody's standardized wage & salary employment forecast

Again, this established two sources (per industry) to share region employment to counties: *Global Insight Share* and *Moody's Share*. Table 2-15 shows forecasted Moody's and Global Insight region share of national wage & salary employment (dividing source-specific values from Table 2-13 by Table 2-10). Similarly, Table 2-16 shows the forecasted Moody's and Global Insight Manhattan share of regional wage & salary employment (dividing source-specific values from Table 2-14 by Table 2-13). Note that the values shown in Table 2-13 are, in practice, calculated for each of the 31 counties in the forecast area. Manhattan is merely shown as an example.

TABLE 2-15. FORECASTED 31-COUNTY SHARE OF NATIONAL WAGE & SALARY EMPLOYMENT

NAICS Industry	2013	2030		2050	
	Benchmark	Moody's	Global Insight	Moody's	Global Insight
11-Agriculture, Forestry, & Fishing	1.6%	1.6%	1.3%	1.5%	1.2%
21-Mining	0.6%	1.2%	0.7%	1.8%	0.6%
22-Utilities	7.6%	6.0%	10.8%	5.2%	12.3%
23-Construction	6.6%	6.1%	5.2%	5.8%	3.7%
31-33-Manufacturing	4.3%	4.1%	4.0%	3.8%	3.8%
42-Wholesale Trade	7.7%	6.6%	7.1%	6.3%	7.4%
44-45-Retail Trade	7.1%	6.1%	7.4%	4.4%	6.8%
48-49-Transportation & Warehousing	7.0%	5.6%	5.9%	4.5%	6.4%
51-Information	11.2%	12.9%	10.5%	14.1%	10.9%
52-Finance & Insurance	10.5%	9.1%	10.2%	7.3%	8.9%
53-Real Estate, Rental & Leasing	10.5%	9.0%	10.3%	6.3%	10.5%
54-Professional, Scientific & Technical	9.8%	8.7%	8.1%	6.8%	6.3%
55-Mgmt. Of Companies & Enterprises	9.0%	8.1%	12.2%	8.0%	18.1%
56-Admin., Support, Waste Mgmt.	7.3%	6.3%	5.7%	6.1%	5.2%
61-Educational Services	12.7%	12.6%	16.6%	14.2%	16.5%
62-Health Care & Social Assistance	8.5%	8.4%	7.8%	8.8%	7.6%
71-Arts, Entertainment & Recreation	8.7%	7.3%	8.5%	6.7%	7.2%
72-Accommodation & Food Services	6.1%	5.6%	6.2%	4.6%	6.2%
81-Other Services	8.7%	7.9%	8.5%	7.3%	7.2%
92-Government	6.9%	6.8%	6.5%	7.6%	5.7%

TABLE 2-16. FORECASTED MANHATTAN SHARE OF 31-COUNTY WAGE & SALARY EMPLOYMENT

NAICS Industry	2013	2030		2050	
	Benchmark	Moody's	Global Insight	Moody's	Global Insight
11-Agriculture, Forestry, & Fishing	6.0%	5.9%	9.4%	6.1%	15.3%
21-Mining	4.3%	2.0%	5.9%	1.4%	10.0%
22-Utilities	21.3%	20.1%	21.5%	18.3%	21.5%
23-Construction	17.5%	17.3%	24.8%	16.3%	35.7%
31-33-Manufacturing	11.6%	10.5%	11.8%	8.1%	11.7%
42-Wholesale Trade	16.5%	15.9%	16.6%	16.4%	16.7%
44-45-Retail Trade	17.8%	17.2%	17.8%	12.2%	17.9%
48-49-Transportation & Warehousing	11.5%	9.6%	11.6%	5.9%	11.7%
51-Information	45.7%	46.6%	46.0%	48.0%	45.3%
52-Finance & Insurance	42.8%	41.1%	42.4%	38.7%	41.2%
53-Real Estate, Rental & Leasing	35.2%	33.3%	35.1%	28.8%	34.4%
54-Professional, Scientific & Technical	41.4%	41.6%	41.8%	42.2%	40.9%
55-Mgmt. Of Companies & Enterprises	32.0%	31.5%	32.4%	31.9%	31.7%
56-Admin., Support, Waste Mgmt.	23.5%	23.8%	23.8%	24.2%	23.3%
61-Educational Services	31.1%	31.7%	31.7%	31.8%	32.2%
62-Health Care & Social Assistance	14.4%	14.8%	14.7%	14.7%	15.0%
71-Arts, Entertainment & Recreation	29.9%	30.7%	30.8%	27.5%	31.7%
72-Accommodation & Food Services	24.7%	24.3%	25.5%	21.9%	26.4%
81-Other Services	22.7%	22.0%	23.0%	18.6%	23.0%
92-Government	14.2%	13.9%	14.1%	13.6%	14.1%

2.5 Forecasting Averaging and Adjustment

The next step in the forecast methodology was to estimate baseline county wage & salary employment using a forecast averaging process. This was accomplished by combining each national forecast with all possible region and county share specifications (on an industry-by-industry basis). Iterating over all possible combinations yielded a range of 12 possible forecasts for each industry (3 national forecasts x 2 region shares x 2 county shares). Baseline payroll employment was selected as the average over all these combinations, subject to minor adjustments based on feedback from local agencies.

2.5.1 Sample Application: Manhattan Professional, Scientific, Technical Services

This section demonstrates the forecast averaging process by stepping through how it was applied for a single county-industry combination. The example is Professional, Scientific, Technical Services in Manhattan, which is the single largest industry-county combination across all 620 possibilities (31 counties x 20 industries). In 2013, Manhattan employment in this sector accounted for roughly 3.2% of all wage & salary employment in the 31-County Forecast Area (see Table 2-13 and Table 2-14).

The process begins by selecting one of the three standardized third-party national employment forecasts (from Table 2-10). Next, a region share method (from Table 2-15) is applied to the national forecast to determine industry employment for the 31-county forecast area. Finally, a county share method (from Table 2-16) is applied to the region forecast to determine the resulting forecasted county employment.

These steps are repeated for all combinations of national forecast, region share, and county share, as shown in Table 2-17. This process results in 12 distinct forecasts. These distinct forecasts form a range, from which an average forecast and standard deviation are calculated. Note that although Table 2-17 only shows calculations for 2030 and 2050, in practice, the calculations are performed for each forecast year (2014 through 2050).

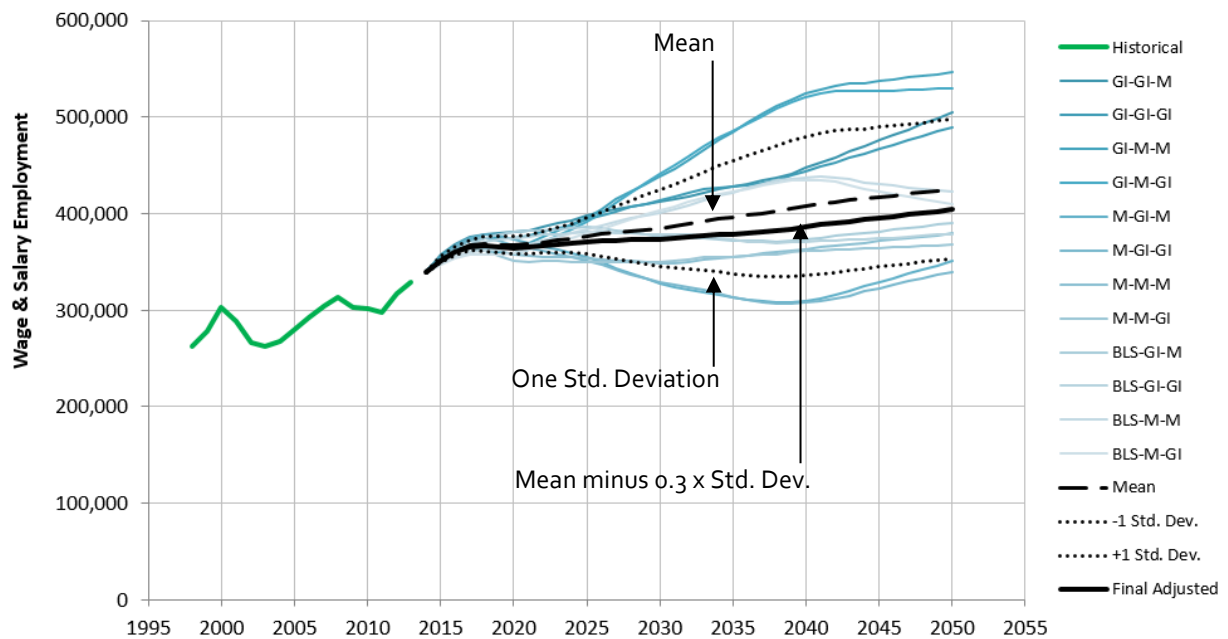
**TABLE 2-17. SAMPLE FORECAST AVERAGING CALCULATIONS FOR MANHATTAN WAGE & SALARY EMPLOYMENT IN
PROFESSIONAL, SCIENTIFIC, TECHNICAL SERVICES (NAICS 54)**

National Forecast			31-County Share			Manhattan Share			Resulting Forecast	
Source	2030 Value	2050 Value	Source	2030 Share	2050 Share	Source	2030 Share	2050 Share	2030	2050
Global Insight	12,174,471	18,950,908	Global Insight	8.14%	6.31%	Global Insight	41.76%	40.94%	413,792	489,600
Global Insight	12,174,471	18,950,908	Global Insight	8.14%	6.31%	Moodys	41.56%	42.21%	411,804	504,767
Global Insight	12,174,471	18,950,908	Moodys	8.67%	6.83%	Global Insight	41.76%	40.94%	440,829	529,942
Global Insight	12,174,471	18,950,908	Moodys	8.67%	6.83%	Moodys	41.56%	42.21%	438,711	546,358
Moodys	9,679,674	13,162,186	Global Insight	8.14%	6.31%	Global Insight	41.76%	40.94%	328,998	340,047
Moodys	9,679,674	13,162,186	Global Insight	8.14%	6.31%	Moodys	41.56%	42.21%	327,417	350,582
Moodys	9,679,674	13,162,186	Moodys	8.67%	6.83%	Global Insight	41.76%	40.94%	350,495	368,066
Moodys	9,679,674	13,162,186	Moodys	8.67%	6.83%	Moodys	41.56%	42.21%	348,810	379,468
BLS	11,129,700	14,663,700	Global Insight	8.14%	6.31%	Global Insight	41.76%	40.94%	378,282	378,839
BLS	11,129,700	14,663,700	Global Insight	8.14%	6.31%	Moodys	41.56%	42.21%	376,464	390,575
BLS	11,129,700	14,663,700	Moodys	8.67%	6.83%	Global Insight	41.76%	40.94%	402,999	410,055
BLS	11,129,700	14,663,700	Moodys	8.67%	6.83%	Moodys	41.56%	42.21%	401,062	422,757
						Average Forecast			384,972	425,921
						Standard deviation			39,545	72,539
						Average minus one standard deviation			345,427	353,383
						Average plus one standard deviation			424,517	498,460

Note: all third-party sources shown in this table were standardized to relevant wage & salary benchmarks.

The final step in generating the forecast was to incorporate feedback from local stakeholders. In the case of New York, it was determined that both Moody's and Global Insight forecasts were too aggressive, so a downward adjustment was applied. The downward adjustment (discussed further in the next section) was made relative to the average forecast based on the observed *variation* across all forecast combinations. For Manhattan, the adjustment was 30% of one standard deviation, meaning that the final forecast was selected as the average (mean) forecast minus 0.3 times the standard deviation observed across all 12 forecasts. All elements of this selection process are shown in Figure 2-4.

FIGURE 2-4. EXAMPLE OF PAYROLL EMPLOYMENT SELECTION PROCESS: MANHATTAN PROFESSIONAL SCIENTIFIC, TECHNICAL SERVICES



In this figure, each blue line reflects one combination of a national forecast, a regional share method, and a county share method. For example, the lightest blue line shows the BLS national forecast shared to the 31-County Region using *Moody's Region Share*, and then shared to counties using *Global Insight County Share* (BLS-M-GI in the legend). The average (mean) across all of these combinations is shown as the dashed black line, and the standard deviation of the range is shown as the two dotted lines. The final forecast (thick black line) shows the adjustment relative to the average forecast (in this case 30% of one standard deviation downward).

The final 2030 and 2050 forecast values in Figure 2-4 can be calculated directly from Table 2-17). That is,

$$\begin{aligned} 2030 \text{ employment} &= 373,108 = 384,972 - (0.3 \times 39,545) \\ 2050 \text{ employment} &= 404,160 = 425,921 - (0.3 \times 72,539) \end{aligned}$$

2.5.2 Final Wage & Salary Forecasts

The preceding section demonstrated the forecast averaging and adjustment process as applied to a single county-industry: Manhattan wage & salary employment in Professional, Scientific, and Technical Services. In practice, this method was applied 620 times – once for each county and industry. Table

2-18 shows all adjustments made based on feedback from local stakeholders. These adjustments were applied at the county level, meaning that within a county, all industries were adjusted using the factors shown in Table 2-18.

TABLE 2-18. SUMMARY OF ADJUSTMENTS APPLIED TO BASELINE WAGE & SALARY EMPLOYMENT FORECASTS

	County	Std. Dev. Adjustment Factor	Reason for Adjustment
NYC	Bronx	-0.30	Based on feedback from local agencies, it was determined that Moody's and Global Insight forecasts were too aggressive in NYC, having been calibrated in a strong growth period. Thus, a downward adjustment was made to make growth trends past 2030 more in line with long-run historical averages.
	Kings (Brooklyn)	-0.30	
	New York (Manhattan)	-0.30	
	Queens	-0.30	
	Richmond (Staten Island)	-0.30	
LI	Nassau	0.10	Based on feedback from local agencies, a modest upward adjustment was made to Mid-Hudson and Long Island Counties to partially offset the downward adjustment made to New York City (except Rockland County).
	Suffolk	0.10	
MH	Dutchess	0.10	
	Orange	0.10	
	Putnam	0.20	
	Rockland	0	
	Sullivan	0.10	
	Ulster	0.10	
	Westchester	0.10	
NJ	Bergen	0.37	
	Essex	0.63	
	Hudson	0.55	
	Hunterdon	0.09	
	Mercer	0.05	
	Middlesex	-0.41	
	Monmouth	0.11	
	Morris	-0.34	
	Ocean	-0.22	
	Passaic	0.97	
	Somerset	-0.53	
	Sussex	0.41	
	Union	0.15	
	Warren	-0.40	
CT	Fairfield	0	No adjustment
	Litchfield	0	
	New Haven	0	

This process yielded a final baseline wage & salary forecast for each county/industry. These are summarized in Table 2-19 and Table 2-20, which respectively show the final baseline wage & salary forecast aggregated to the industry and county level.

TABLE 2-19. BASELINE FORECAST WAGE & SALARY FORECAST BY INDUSTRY, 31-COUNTY REGION (THOU.)

NAICS Industry	2015	2020	2025	2030	2035	2040	2045	2050
11-Ag., Forestry, & Fishing	21	21	21	21	21	20	20	19
21-Mining	5	6	6	6	6	6	6	6
22-Utilities	42	40	39	38	37	35	33	32
23-Construction	401	429	447	462	471	485	497	509
31-33-Manufacturing	514	496	470	446	426	406	387	368
42-Wholesale Trade	453	448	441	435	437	435	435	435
44-45-Retail Trade	1,093	1,104	1,092	1,070	1,044	1,010	976	941
48-49-Transp. & Warehousing	308	300	296	291	290	287	281	275
51-Information	304	319	330	337	350	366	386	406
52-Finance & Insurance	622	630	632	635	641	647	655	663
53-Real Estate, Rental & Leasing	210	208	207	204	201	198	193	189
54-Prof., Scientific & Tech.	847	886	905	914	936	959	982	1,004
55-Mgmt. Of Companies	198	200	203	205	211	218	228	240
56-Admin., Suppt., Waste Mgmt.	641	676	706	738	780	822	874	928
61-Educational Services	444	477	502	526	550	576	603	630
62-Health Care & Soc. Assistance	1,580	1,710	1,778	1,842	1,916	1,992	2,065	2,140
71-Arts, Entertainment & Rec,	174	178	181	182	185	186	188	189
72-Accommodation & Food Svcs.	771	794	805	823	848	869	888	910
81-Other Services	550	559	555	553	554	552	547	541
92-Government	1,503	1,524	1,553	1,591	1,626	1,673	1,705	1,741
Total - All Industries	10,681	11,007	11,167	11,321	11,529	11,744	11,950	12,166

TABLE 2-20. BASELINE FORECAST WAGE & SALARY EMPLOYMENT BY COUNTY, ALL INDUSTRIES (THOU.)

County/Subregion	2015	2020	2025	2030	2035	2040	2045	2050
Bronx	381	391	397	403	409	417	423	430
Kings	823	842	854	865	878	893	906	920
New York	2,433	2,492	2,519	2,543	2,571	2,599	2,629	2,660
Queens	695	707	712	717	722	730	734	739
Richmond	134	136	139	140	142	144	145	147
Total - New York City	4,466	4,568	4,621	4,669	4,724	4,783	4,838	4,897
Nassau	560	574	580	586	596	606	617	628
Suffolk	604	624	638	650	664	678	693	708
Total - Long Island	1,163	1,198	1,217	1,236	1,260	1,284	1,309	1,335
Dutchess	114	117	121	124	127	130	134	138
Orange	141	146	151	155	160	166	171	177
Putnam	26	27	27	27	27	27	27	27
Rockland	111	116	120	123	127	131	134	138
Sullivan	25	28	30	33	36	40	43	47
Ulster	62	63	64	65	66	67	69	70
Westchester	421	432	438	443	450	457	464	472
Total - Mid-Hudson	900	929	950	971	994	1,018	1,043	1,069
Bergen	444	459	470	476	486	495	503	512
Essex	373	389	392	397	407	418	428	440
Hudson	293	313	320	327	337	347	356	365
Hunterdon	56	57	57	58	59	61	62	64
Mercer	247	259	265	272	280	289	297	306
Middlesex	398	413	419	425	437	448	456	465
Monmouth	266	273	274	275	281	288	295	303
Morris	304	314	317	319	323	326	329	331
Ocean	169	178	184	188	195	201	208	215
Passaic	190	197	201	204	209	214	219	223
Somerset	193	200	203	206	211	216	220	223
Sussex	44	45	45	46	47	47	48	49
Union	246	255	258	261	267	273	279	285
Warren	36	37	38	38	39	39	40	40
Total - New Jersey	3,258	3,388	3,442	3,492	3,577	3,662	3,740	3,821
Fairfield	455	470	478	487	498	510	522	536
Litchfield	61	62	63	64	65	66	67	68
New Haven	378	391	396	403	411	421	430	440
Total - Connecticut	894	924	936	954	973	996	1,019	1,044
Total - 31-County Region	10,681	11,007	11,167	11,321	11,529	11,744	11,950	12,166

2.6 Self-Employment Forecasts

Once payroll employment was finalized, the next step in the forecasting process was to calculate self-employment. As discussed in Section 2.2.3, benchmark self-employment (defined to include

incorporated, unincorporated, and unpaid family workers) is estimated from American Community Survey place of work data (tables B24070, B08526 and B08528; 1-yr samples).

To forecast self-employment, the benchmark self-employment and wage & salary employment were used to establish average self-employment rates (self-employment divided by wage & salary employment) over the period 2005-2012. These constant rates were then applied to the forecasted wage & salary employment, derived in the previous step. Table 2-21 shows sample calculations for Manhattan.

TABLE 2-21. SAMPLE SELF-EMPLOYMENT CALCULATIONS FOR MANHATTAN

NAICS Industry	Wage & Salary Forecast		Self-Employment Rate	Self-Employment Forecast	
	2030	2050		2030	2050
11-Ag., Forestry, & Fishing	1,527	1,866	36.0%	549	672
21-Mining	210	269	4.4%	9	12
22-Utilities	7,253	5,611	0.0%	0	0
23-Construction	92,204	120,035	20.2%	18,623	24,245
31-33-Manufacturing	48,327	34,390	6.4%	3,078	2,190
42-Wholesale Trade	69,665	69,881	7.3%	5,106	5,122
44-45-Retail Trade	182,444	130,578	6.5%	11,859	8,487
48-49-Transp. & Warehousing	29,664	21,492	19.1%	5,678	4,114
51-Information	152,454	181,296	8.1%	12,415	14,764
52-Finance & Insurance	259,440	252,327	2.8%	7,245	7,046
53-Real Estate, Rental & Leasing	68,370	56,450	13.8%	9,436	7,791
54-Prof., Scientific & Tech.	373,108	404,160	14.1%	52,667	57,051
55-Mgmt. Of Companies	62,253	68,330	0.1%	82	90
56-Admin., Suppt., Waste Mgmt.	171,213	212,367	11.2%	19,246	23,873
61-Educational Services	158,962	189,403	3.6%	5,656	6,739
62-Health Care & Soc. Assistance	267,830	311,180	10.2%	27,253	31,664
71-Arts, Entertainment & Rec,	55,082	54,865	37.1%	20,413	20,333
72-Accommodation & Food Svcs.	200,557	206,616	7.8%	15,555	16,025
81-Other Services	122,177	108,124	9.6%	11,776	10,422
92-Government	220,658	231,073	0.0%	0	0
Total - All Industries	2,543,398	2,660,313		226,647	240,637

Note that although within each county, industry-specific self-employment rates remain constant throughout the forecast period, aggregate self-employment rates can vary, both at the county and region level. These changes occur through differential industry growth. For example, within a county, if high self-employment sectors grow faster than low self-employment sectors, then the county's overall self-employment rate will rise

TABLE 2-22. BASELINE SELF-EMPLOYMENT BY COUNTY, ALL INDUSTRIES COMBINED (THOU.)

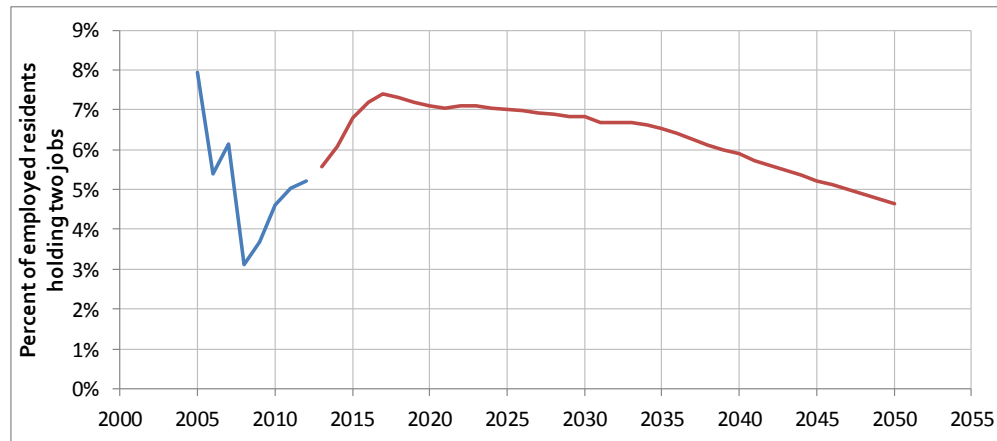
County/Subregion	2015	2020	2025	2030	2035	2040	2045	2050
Bronx	33,900	34,592	35,065	35,171	35,343	35,408	35,531	35,604
Kings	101,997	103,748	104,719	104,857	105,352	105,681	106,175	106,544
New York	213,076	219,761	223,470	226,647	230,205	233,696	237,171	240,637
Queens	77,322	77,507	77,186	75,959	75,253	74,354	73,566	72,628
Richmond	12,896	12,950	13,007	12,918	12,821	12,713	12,622	12,508
Total - New York City	439,192	448,559	453,446	455,551	458,973	461,852	465,064	467,922
Nassau	68,127	69,878	70,444	71,188	72,272	73,350	74,439	75,577
Suffolk	73,321	76,003	77,689	79,298	81,033	82,747	84,495	86,252
Total - Long Island	141,448	145,882	148,132	150,486	153,306	156,097	158,935	161,828
Dutchess	12,250	12,648	12,989	13,318	13,622	13,947	14,279	14,630
Orange	14,011	14,568	15,067	15,553	16,023	16,499	17,010	17,535
Putnam	4,067	4,085	4,057	4,008	3,955	3,918	3,881	3,843
Rockland	14,329	14,997	15,471	15,929	16,382	16,826	17,276	17,740
Sullivan	2,976	3,288	3,543	3,995	4,449	4,897	5,344	5,796
Ulster	9,665	9,764	9,807	9,908	10,040	10,169	10,290	10,416
Westchester	55,203	56,901	57,838	58,540	59,433	60,305	61,159	62,030
Total - Mid-Hudson	112,501	116,251	118,773	121,251	123,903	126,560	129,239	131,990
Bergen	47,465	49,613	51,059	51,724	52,582	53,380	53,765	54,157
Essex	30,043	31,942	32,465	32,988	33,926	34,961	35,804	36,690
Hudson	21,241	22,865	23,376	23,713	24,074	24,396	24,574	24,766
Hunterdon	6,499	6,750	6,738	6,711	6,807	6,926	7,016	7,114
Mercer	15,090	16,049	16,462	16,833	17,360	17,906	18,333	18,762
Middlesex	25,582	26,970	27,453	27,789	28,460	29,213	29,639	30,003
Monmouth	28,179	29,353	29,494	29,455	29,855	30,430	30,932	31,474
Morris	26,167	27,433	27,781	27,977	28,435	28,843	29,154	29,414
Ocean	21,617	23,097	23,827	24,245	24,879	25,674	26,364	27,031
Passaic	16,426	17,204	17,536	17,776	17,955	18,116	18,145	18,194
Somerset	15,406	16,240	16,581	16,763	17,095	17,456	17,647	17,779
Sussex	6,559	6,828	6,873	6,848	6,831	6,852	6,846	6,849
Union	20,010	21,050	21,283	21,604	22,206	22,837	23,365	23,914
Warren	3,753	3,917	3,982	4,028	4,060	4,116	4,130	4,141
Total - New Jersey	284,039	299,311	304,911	308,454	314,525	321,106	325,715	330,287
Fairfield	58,200	61,341	63,462	66,139	68,676	71,549	74,421	77,427
Litchfield	10,917	11,469	11,688	12,015	12,309	12,625	12,891	13,163
New Haven	33,463	35,325	36,448	37,965	39,466	41,186	42,891	44,692
Total - Connecticut	102,580	108,135	111,598	116,119	120,451	125,360	130,203	135,282
Total - 31-County Region	1,079,759	1,118,138	1,136,860	1,151,862	1,171,158	1,190,975	1,209,155	1,227,309

2.7 Reconciliation

The final step was to reconcile total employment forecasts with employed labor force forecasts (Section 4.o). This was done in three steps. The first step was to adjust for commuting into and out of the 31-County Region. According to 2006-2010 ACS Journey-to-Work data, the region had in-commuting and out-commuting rates of 3.00% and 1.67%, respectively. These rates were held static through the end of the forecast period.

The next step in reconciliation was to estimate future multiple job-holding rates. These were calculated by subtracting employed residents from total place-of-work jobs to estimate non-primary jobs by year, after controlling for net commuting. The multiple job-holding rate was calculated as the percent of employed residents holding two jobs (a primary and a non-primary). These are shown in Figure 2-5. By deriving this value, it ensures that estimated primary jobs (by place of work) total to the same value as employed residents. With these two figures balanced, county place-of-residence and place-of-work totals can be used to estimate intra-county journey-to-work flows.

FIGURE 2-5. FORECASTED MULTIPLE JOB-HOLDING RATE, 31-COUNTY FORECAST AREA



These first two steps yield primary employment totals by place-of-work that are regionally consistent with the employed labor force. The last step in reconciliation, then, is to balance place-of-work jobs against place-of-residence employment totals. This was done by converting total employment by place of work into primary jobs (i.e., subtracting multiple-job-holders), and then balancing Journey-to-Work (JTW) trends. JTW trends were balanced using iterative proportional fitting, “seeding” the JTW matrix with values from the 2006-2010 American Community Survey. Figure 2-6 shows the results of this process in terms of distribution of Manhattan workers by place of residence. Detailed results are shown in Table 2-23.

FIGURE 2-6. SUMMARY OF JOURNEY-TO-WORK RECONCILIATION FOR MANHATTAN

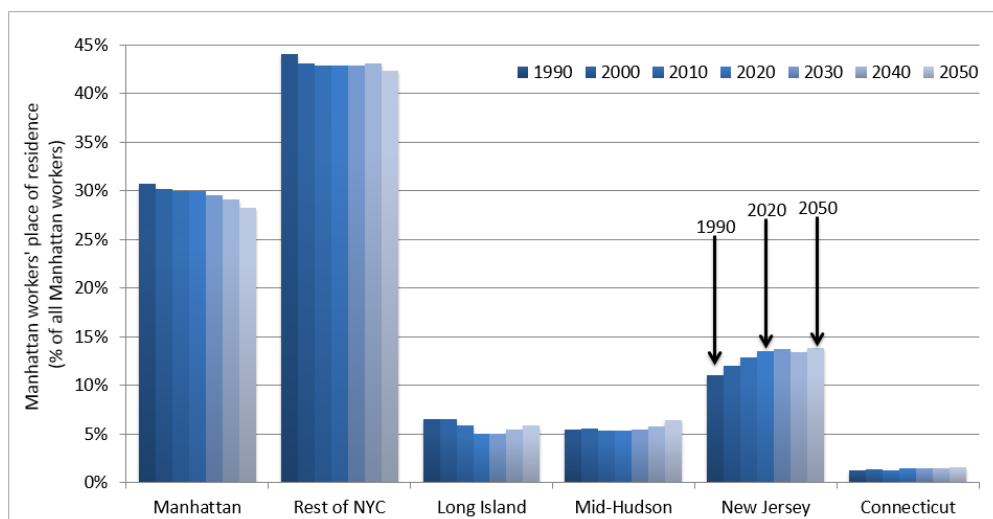


TABLE 2-23. SUMMARY OF LABOR MARKET RECONCILIATION PROCESS FOR BENCHMARK EMPLOYMENT AND EMPLOYED LABOR FORCE:

JOURNEY-TO-WORK FLOWS TO MANHATTAN AND NEW YORK CITY

ALL VALUES PRIMARY JOBS		Raw Journey To Work			Benchmark Calibration			Forecast							
		1990	2000	06-10	2005	2010	2013	2015	2020	2025	2030	2035	2040	2045	2050
JTW to Manhattan		2,071,019	2,089,922	2,326,754	2,236,931	2,360,506	2,414,534	2,441,096	2,491,174	2,520,712	2,551,798	2,588,671	2,637,277	2,690,250	2,741,365
Place of Residence	Manhattan	635,761	631,132	696,081	683,412	707,880	724,966	724,133	746,507	751,991	754,909	760,537	767,880	773,186	774,799
	Rest of NYC	912,373	900,336	1,005,811	958,327	1,011,415	1,022,761	1,024,859	1,067,599	1,080,181	1,095,089	1,114,693	1,136,555	1,151,318	1,160,017
	Long Island	135,710	135,606	135,652	134,825	138,352	131,183	128,362	125,668	125,801	128,700	133,936	142,475	151,240	159,800
	Mid-Hudson	112,651	117,055	121,139	117,900	126,747	128,386	134,177	132,421	134,899	139,004	144,867	153,127	163,845	176,211
	New Jersey	228,455	250,213	294,186	272,795	303,904	330,008	346,430	337,935	345,542	351,683	352,468	353,990	364,376	380,722
	Connecticut	26,576	27,470	31,436	29,955	29,773	35,231	38,086	36,918	37,635	37,787	37,891	39,074	41,246	43,542
	Rest of World	19,493	28,110	42,449	39,717	42,436	41,999	45,048	44,126	44,663	44,625	44,280	44,175	45,039	46,275
Place of Residence	Manhattan	30.7%	30.2%	29.9%	30.6%	30.0%	30.0%	29.7%	30.0%	29.8%	29.6%	29.4%	29.1%	28.7%	28.3%
	Rest of NYC	44.1%	43.1%	43.2%	42.8%	42.8%	42.4%	42.0%	42.9%	42.9%	42.9%	43.1%	43.1%	42.8%	42.3%
	Long Island	6.6%	6.5%	5.8%	6.0%	5.9%	5.4%	5.3%	5.0%	5.0%	5.0%	5.2%	5.4%	5.6%	5.8%
	Mid-Hudson	5.4%	5.6%	5.2%	5.3%	5.4%	5.3%	5.5%	5.3%	5.4%	5.4%	5.6%	5.8%	6.1%	6.4%
	New Jersey	11.0%	12.0%	12.6%	12.2%	12.9%	13.7%	14.2%	13.6%	13.7%	13.8%	13.6%	13.4%	13.5%	13.9%
	Connecticut	1.3%	1.3%	1.4%	1.3%	1.3%	1.5%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.6%
	Rest of World	0.9%	1.3%	1.8%	1.8%	1.8%	1.7%	1.8%	1.8%	1.8%	1.7%	1.7%	1.7%	1.7%	1.7%
JTW to New York City		3,726,776	3,755,130	4,250,359	4,117,341	4,348,449	4,555,231	4,608,968	4,699,465	4,755,306	4,810,056	4,875,942	4,963,017	5,049,385	5,135,030
Residence	NYC	2,933,380	2,922,206	3,337,908	3,239,719	3,404,029	3,564,178	3,583,891	3,700,219	3,740,824	3,776,722	3,823,865	3,879,205	3,916,339	3,941,432
	Long Island	279,421	277,867	277,931	280,430	286,683	283,272	278,979	271,351	271,740	277,384	287,593	304,740	322,155	339,774
	Mid-Hudson	169,019	175,365	181,953	175,249	192,993	199,555	208,650	205,121	208,859	215,018	223,597	235,757	251,585	270,109
	New Jersey	278,077	304,868	351,468	326,527	364,846	400,432	421,170	409,727	419,088	426,107	426,667	428,053	440,322	460,155
	Connecticut	30,613	32,213	36,452	34,675	34,669	41,527	44,959	43,513	44,368	44,525	44,596	45,928	48,423	51,079
	Rest of World	36,266	42,611	64,647	60,741	65,229	66,267	71,318	69,533	70,427	70,299	69,625	69,334	70,560	72,481
	NYC	78.7%	77.8%	78.5%	78.7%	78.3%	78.2%	77.8%	78.7%	78.7%	78.5%	78.4%	78.2%	77.6%	76.8%
Residence	Long Island	7.5%	7.4%	6.5%	6.8%	6.6%	6.2%	6.1%	5.8%	5.7%	5.8%	5.9%	6.1%	6.4%	6.6%
	Mid-Hudson	4.5%	4.7%	4.3%	4.3%	4.4%	4.4%	4.5%	4.4%	4.4%	4.5%	4.6%	4.8%	5.0%	5.3%
	New Jersey	7.5%	8.1%	8.3%	7.9%	8.4%	8.8%	9.1%	8.7%	8.8%	8.9%	8.8%	8.6%	8.7%	9.0%
	Connecticut	0.8%	0.9%	0.9%	0.8%	0.8%	0.9%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%	1.0%	1.0%
	Rest of World	1.0%	1.1%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	1.4%
31-County In-Commuters		215,581	248,102	311,475	307,596	316,535	306,732	314,104	323,859	328,613	333,136	339,189	345,471	351,459	357,714
31-County Out-Commuters		140,136	152,572	172,682	182,411	175,882	181,726	183,556	188,670	191,580	194,655	198,813	203,908	208,981	214,035
31-County Net In-Commuters		75,445	95,530	138,793	125,185	140,653	125,006	130,548	135,189	137,033	138,480	140,376	141,564	142,479	143,679

3.0 POPULATION MODEL

As indicated in the introduction of this technical memorandum, two separate population forecasts will be developed for the 31-County Forecast Region. One model will be used to develop population projections for the five counties comprising the NYC subregion while a separate model will be used to generate population projections for the remaining 26 counties. The primary outputs generated by both population models include:

- Total population
- Population in households
- Population in group quarters

3.1 Overview of Population Forecasting Process

Both DCP and LBG employed disaggregate cohort component (CC) forecast methods as the primary basis of the population forecasts. The CC model is based on the premise that the population can be broken down into two main components; natural increase comprising births and deaths added and subtracted respectively from a base population reference, and migration that is either added or subtracted depending on whether there is net positive or negative in and out migration. The CC approach can simply be represented as follows:

$$\text{Projected Population (P1)} = \text{Base Population (Po)} + \text{Births} - \text{Deaths} + \text{Net Migration}$$

The CC method is commonly used in several demographic studies and employs detailed age, and sex data from the U.S. Census Bureau. The base year population is stratified by sex into 18 age cohorts; the first 17 which represent 5 year groupings e.g. ages 0-4, 5-9, 10-14... 80-84, and a final open cohort of persons 85 and older. Age specific fertility rates (by age group) are applied to the female population of child bearing age groups to generate an estimate of births during each five year interval of the 2050 projection horizon. Similarly, age specific survival rates are also applied to each age group to generate estimates of the survived population in each successive five year time increment. The estimated volume of net migration (both in and out migration) is added to the survived population based on historically observed age specific patterns of migration.

3.1.1 Births & Fertility Rates

The age-specific fertility rates (ASFR) used to estimate the number of births in each time interval are calculated by taking the ratio of live births reported by females within a given age group, divided by the total population of females within that age group (Equation 3-1); and is expressed as the number of live births per 1,000 females.

Equation 3-1

$${}_nASFR_x = \frac{{}_nB_x}{{}_nPF_x}$$

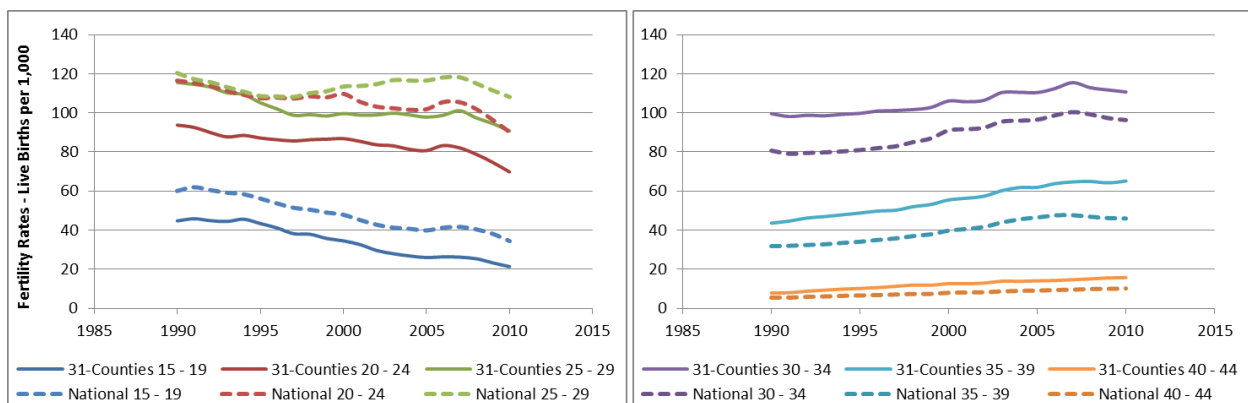
Where:

- x = the lowest age in the interval
- n = number of years in the age interval
- ${}_nASFR_x$ = age specific fertility rate
- ${}_nB_x$ = number of births occurring to persons aged x to n + x
- ${}_nPF_x$ = female household population aged x to n + x

Whereas other models estimate ASFRs using the total female population associated with a given age group, both the NYC and 26-County Models will estimate and apply ASFRs on the female household population - recognizing the fact that fertility patterns of population in group quarters are noticeably different than those of the general population.

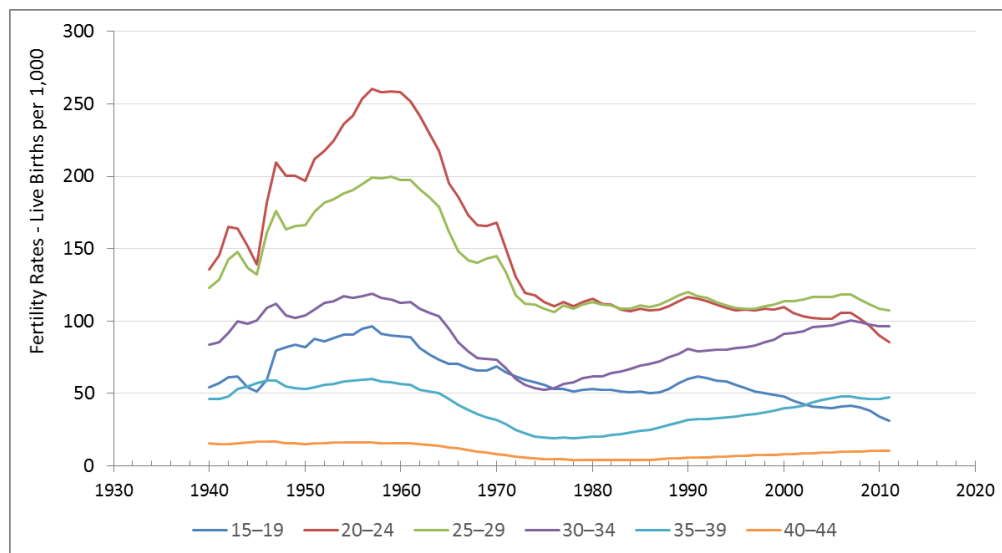
As indicated in the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum, the ASFRs at the national, regional and county level have been changing over time as shown in Figure 3-1. Although exhibiting clear trends of ASFR changes in the recent past, the historical data also presents a significant challenge of defining future ASFR assumptions to be applied in the forecasting process. The longer historical trace of ASFRs at the National level in Figure 3-2, more clearly demonstrates the uncertainty implicit in projecting ASFRs over a long term horizon of similar length to the 2050 forecasting period

FIGURE 3-1. AGE SPECIFIC FERTILITY RATE TRENDS, NATIONAL & 31-COUNTY REGION (1990-2010)



Source: National Center for Health Statistics, & New York, New Jersey, Connecticut State Departments of Health, Louis Berger (2015)

FIGURE 3-2. NATIONAL AGE SPECIFIC FERTILITY RATE TRENDS (1940-2010)



Source: National Center for Health Statistics

Two approaches were considered in addressing future ASFR assumptions; holding the most recent rates constant throughout the forecast, and extrapolation of recent historical trends into the future. A justification for holding rates constant is that the direction and magnitude of the future changes cannot be predicted accurately or reliably.²⁸ Even though the recent ASFR changes discussed in the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum display relatively clear trends over the 1990-2010 period, there is still uncertainty regarding the degree to which those recent trends are likely to extend into the long term future.

On the other hand however, the strength and coherence of recent trends identified in the Trends Memorandum point clearly to directional change that is coherent and systematic enough to be considered for extrapolation into the future. Similar extrapolation approaches have previously been applied in other forecasts with adjustments made to account for gradual slowing in observed rates of change²⁹. This type of approach was considered and tested in model development and application for both the NYC and 26-County Regions.

The various ASFRs associated with each geography, can be summarized in a single metric – Total Fertility Rate (TFR) – that is intended to represent the number of births that a hypothetical group of 1,000 women would have over their lifetimes, based on the age-specific birth rates in a given year. It is calculated by summing the ASFR's (calculated on an annual basis) and multiplying by five to account for five year interval within each age group. It should be noted that TFR measures do not account for the proportional distribution of women in each reproductive age group and therefore trends in ASFRs and resulting TFRs could differ from trends in actual births as outlined in the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum.

3.1.2 Mortality & Survival Rates

Unlike the previous NYMTC forecasting effort that adopted National survival rates from the U.S. Census Bureau, age-specific survival rates representing the probability of surviving from one age cohort to the next were calculated using age specific death rates (ASDR) calculated for each county. ASDRs represents the proportion of persons in each age group that die in a given year, and is simply calculated as the ratio of the number of deaths observed in that age group divided by the total corresponding population as shown in Equation 3-2.

Equation 3-2

$${}_nM_x = \frac{{}_nD_x}{{}_nP_x}$$

Where:

- x = the lowest age in the interval
- n = number of years in the age interval
- ${}_nM_x$ = age specific death rate (ASDR)
- ${}_nD_x$ = number of deaths occurring to persons aged x to n + x
- ${}_nP_x$ = number of persons aged x to n + x

The ASDRs were used to generate life tables that subsequently helped calculate survival rates by age; these rates represent the percentage of persons who are likely to survive to the next five year time point. The life table is an elegant way of representing the mortality and survival experiences of a cohort of individuals. Starting with ASDRs, life tables are constructed by organizing various elements of the life expectancy and survival rate calculation in the following columns:

Proportion dying (${}_nq_x$). Proportion of persons alive at the beginning of the age interval but dying during the age interval. There is a subtle difference between the ${}_nq_x$ and ${}_nM_x$ measures;

the former represent the probability of dying for a given cohort, while the latter represents the annual mortality rate. Because the denominator in the ${}_nM_x$ calculation does not reflect the population at the beginning of the interval, an adjustment must be made to account deaths occurring during the year. Given this adjustment, it can be shown that ${}_nq_x$ is generally calculated as shown in Equation 3-3:

Equation 3-3

$${}_nq_x = \frac{n({}_nM_x)}{1 + ({}_nM_x)(n)(1 - {}_na_x)}$$

Where ${}_na_x$ is a separation factor that represents the proportion of the interval lived by those who die and is typically held at a value 0.5 for most age group. Equation 3-3 can also be alternatively expressed as shown below in Equation 3-4.

Equation 3-4

$${}_nq_x = \frac{2n \times {}_nM_x}{2 + (n){}_nM_x}$$

Number surviving (l_x). This is the number of persons who survive to the exact age x out of a beginning cohort of 100,000. Starting with an initial theoretic population of 100,000 at age 0 (i.e. $l_0 = 100,000$), l_x in all subsequent age groups is calculated by going back to the previous age group and subtracting the number of people dying (${}_nd_x$) from the l_x .

Number dying (${}_nd_x$). This is the number of deaths of people dying between the interval defined by x and $x + n$. This is calculated in the Table by multiplying l_x by ${}_nq_x$ as described above.

Person years lived during an age interval (${}_nL_x$). This represents the sum total of the person years lived between age x and $x + n$. Given that deaths are assumed to occur evenly during the interval, this value is calculated as:

Equation 3-5

$${}_nL_x = n \times \frac{(l_x + l_{x+n})}{2}$$

Because there is no l_{x+n} that can be used to calculate the ${}_nL_x$ measure associated with the terminal age interval (85+), an approximation of ${}_nL_x$ measure is calculated dividing l_x or ${}_nd_x$ (which are equivalent at the last open age group) by ${}_nM_x$.

Total person-years yet to be lived (T_x). This represents the sum total of person years to be lived in from the beginning of age interval x and $x + n$, and all subsequent intervals thereafter. This is calculated in the life table by summing the ${}_nL_x$ measures starting with the oldest open age group and working back to the first age group.

Life expectancy (e_x). The average number of years life remaining to persons alive at the beginning of the age interval x . This is calculated by dividing T_x by l_x .

Age-specific survival rate (${}_nS_x$). The probability of surviving from one age group to the next is one of the primary outputs of the life table calculations described above. This measure is typically calculated for all age cohorts using the general formula presented in Equation 3-6.

Equation 3-6

$${}_nS_x = \frac{{}_nL_{x+n}}{{}_nL_x}$$

Figure 3-3 provides a graphical example of some of the elements from Equation 3-6 used to calculate survival rates.

The only exceptions to the use of Equation 3-6 is the calculation of the terminal age interval where once again there is no ${}_nL_{x+n}$ value that can be used in calculation, a second exception is the calculation of survival rates for the first two age cohorts (i.e birth to 0-4, and 0-4 to 5-9). In the case of the last open ended cohort, five year survival rates are estimated by taking the ratio of the T_x values associated with the two oldest age groups (for instance: ${}_5S_{80} = T_{85}/T_{80}$).

The treatment of the first two age intervals simply requires some modifications to account for the different size of the age interval. The survival rate of births into the 0-4 age group is calculated using Equation 3-7 (using a denominator that assumes a beginning cohort of 100,000 multiplied by five), while the five year survival rate of the 0-4 age group is calculated using Equation 3-8.

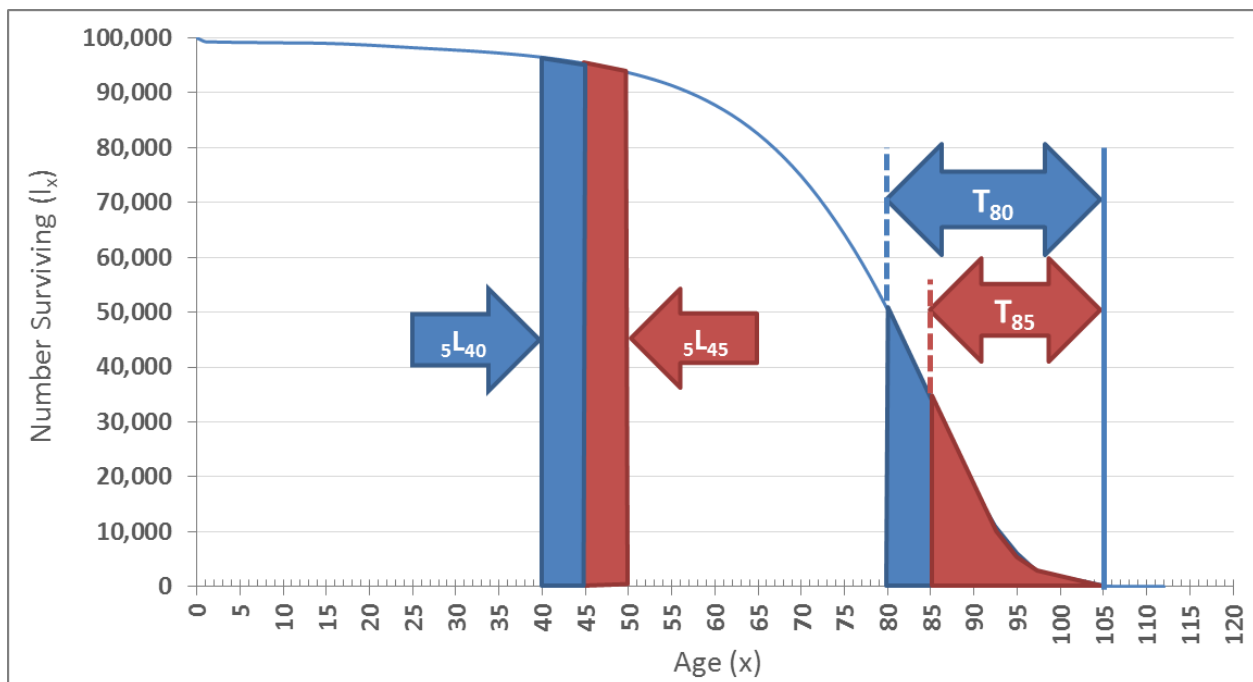
Equation 3-7

$${}_5S_{birth} = \frac{{}_1L_0 + {}_4L_1}{500,000}$$

Equation 3-8

$${}_5S_0 = \frac{{}_5L_5}{{}_1L_0 + {}_4L_1}$$

FIGURE 3-3. CONCEPTUAL REPRESENTATION OF LIFE TABLE COMPONENTS IN SURVIVAL RATE CALCULATION



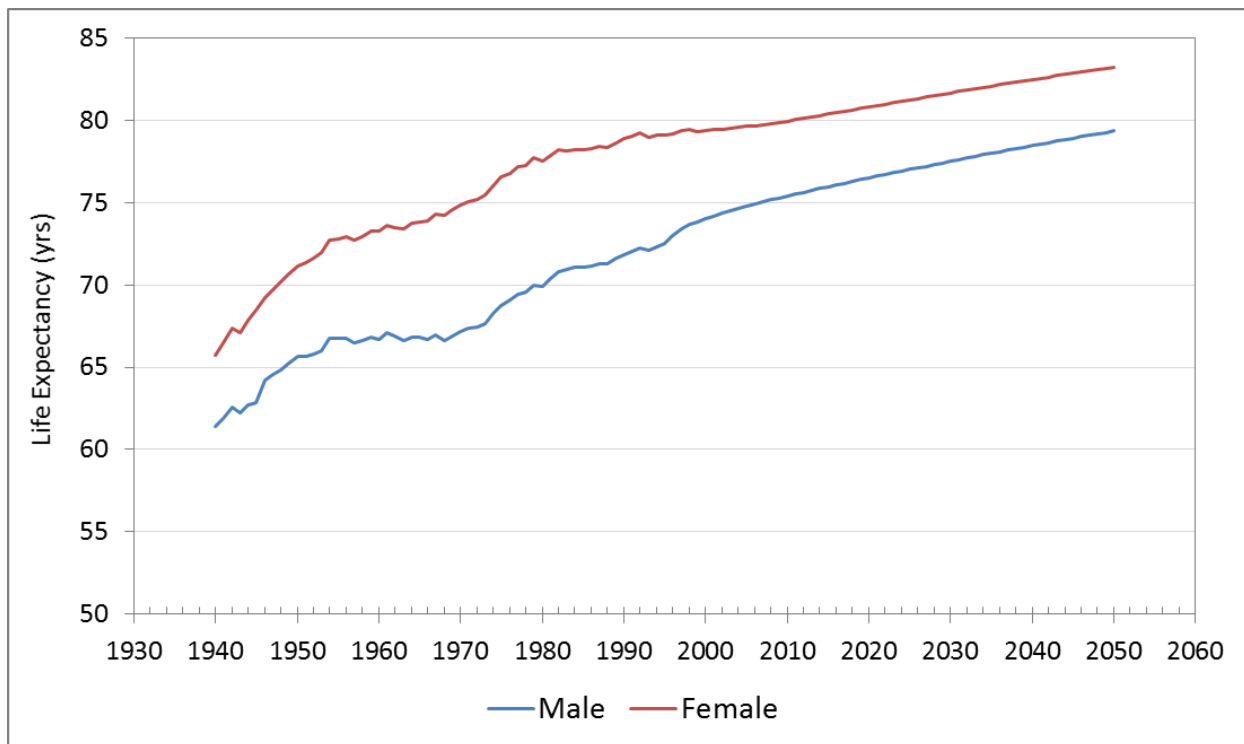
There are a number approaches that could address the issue of future survival rate assumptions to be applied in the forecasting process. One option is to hold current survival rates constant, although this is

unlikely to be a reliable foundation over the long term³⁰ – especially given the recent trends in National and regional life expectancy.

As indicated in the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum, mortality rates in the 31-County Forecast Region have declined noticeably in the last few decades, mirroring national trends that reflect improvements in infant mortality, advancements in medicine and public health, changing lifestyles and improved standards of living, and improvements in motor vehicle safety. The trends in increased life expectancy are projected to continue as indicated by the Social Security Administration's (SSA) estimates presented in Figure 3-4, that take all the outlined factors into consideration. Regional estimates of life expectancy are also anticipated to change in some correspondence to the forecasted increases implied by the SSA projections.

Further descriptions and actual examples of the life table construction and calculation and resulting life expectancy and survival rate outputs will be provided in the detailed discussions of mortality and survival rates for both the NYC and 26-County Regions.

FIGURE 3-4. PERIOD TABLE BASED ESTIMATE OF U. S. LIFE EXPECTANCY AT BIRTH (1940–2050)



Source: Social Security Administration

3.1.3 Migration Rates

Migration is the most volatile element of population change in general cohort component forecasting approach. The age-specific rates of net migration are estimated using the survival analysis method that relies on historical data with the known population from at least two time periods. The natural increase from an initial known population is calculated by accounting for the number of births and deaths during the specified time interval to the second known population. For example, some number of 45-49 year olds in 2000 will survive to ages 55-59 in 2010. This expected population of 55-59 year olds is then compared to the observed or actual population of 55-59 year olds in the 2010 census; the difference or residual is net migration.

As indicated in the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum, the general profile of age-specific migration rates is typically well defined with the greatest area of uncertainty residing in the degree to which individual age-specific rates fluctuate around the general profile over time. Given this decade-by-decade uncertainty in migration rates, the Project Team conducted several five-year survival analyses over two decades (1990-2010) to create a range from which a more reliable average rate of migration could be calculated and applied in the forecasting process.

Whereas some studies estimate an age-specific migration index (rate describing the propensity to migrate) by dividing the residual of volume of migrants by the corresponding surviving population, the migration index applied in these efforts will be derived by dividing the residual figure by the initial population (population-at-risk) for each age group.

3.1.4 Additional Issues and Considerations in Model Application

As per the documentation provided for both the 2035 forecast and 2040 update efforts, separate population models were created for each of the NYMTC partner counties of New York City (Bronx, Kings, New York, Queens, Richmond), Long Island (Nassau, Suffolk), and Lower Hudson Valley (Putnam, Rockland, Westchester). Another set of separate sub models were created for the remaining subregions and the results subsequently shared down to the individual counties. The current effort will develop separate population forecasts for each county utilizing individual county level input assumptions where possible and substituting subregional assumptions where necessary to fill gaps in county level data or input assumptions.

Another key difference in methodological approach is the treatment of race and ethnicity. The two previous efforts used separate cohort component models that relied on fertility and survival rate input assumptions distinguished by race and ethnicity. Therefore, due to the limitations encountered in developing regional fertility and survival rates distinguished by race and ethnicity, the previous forecast effort relied on national-level race-specific rates of fertility and survival that were subsequently adapted to the region through calibration with historical records. For reasons detailed in the White Paper on Methodology (Technical Memorandum 2.1), the Project Team has elected not to use race-specific inputs in the CC model, and to instead apply race and ethnicity overlay on select outputs of the population model.

A key challenge in applying the cohort-component model rests in identifying appropriate fertility, mortality, and migration rates for the various age cohorts going forward. Future projections of these critical measures are subject to uncertainty and the project team tested alternative scenarios of these metrics as means to explore the range of uncertainty in resulting population forecasts, including comparisons the ranges bracketed by the upper and lower forecasts.

The following Sections discuss the methodological details used to develop the population projections for both the NYC and the 31-County Forecast Region. The discussion is focused around regionally observed trends in the major inputs to the CC model, and the resulting implications on assumptions applied in the two separate CC models.

3.2 Population Projections – New York City Only

The cohort-component method applied by DCP for the New York City subregion is a purely demographic method, meaning that it responds solely to changes in assumptions about fertility, mortality, and migration. Given the region's high levels of development and the existing population density, the resulting outputs obtained from the CC process are also evaluated in the context of the city's planning environment and reconciled.

3.2.1 New York City Populations using the Cohort Component Model

As discussed in the sections above, the CC model forecasts population by interacting age-specific fertility, survival and net migration rates by sex. The group quarters population (those residing in a dormitory, nursing home, prison, homeless shelter etc.) are withheld from the natural increase and net migration calculations within the CC model given that this section of the population display different patterns of behavior with respect to those factors of population change.

Group Quarters Population - When considering those that live in a dormitory, nursing home, or even a prison, it is clear that their mortality, fertility, and migration patterns are entirely different with respect to the general population. It is a common practice to remove group quarters from the general population, and place them back into the population figures after the projection is completed. This method allows for those in group quarters to be included into the forecast, but under completely constant conditions. That is, the group quarters population remains the same from base year to final projection because it is subtracted from the population before the projection, and added to the population after the projection, which makes them independent of any components of change.

The following provides a brief description of the inputs applied in the CC model and the assumptions used to derive them.

3.2.1.1 Fertility Rates

To mitigate the potential effects of a single-year anomaly, births in the five NYC boroughs were averaged for 2008, 2009, 2010, and age-specific fertility rates were calculated based on the 2010 population for age cohorts spanning 15-49 years.³¹ Birth data were obtained from the New York City Department of Health and Mental Hygiene, while population data by age were from the decennial census. Age specific fertility rates were both calculated using Equation 3-1 and multiplied by five to obtain a rate for the five year projection interval. Table 3-1 provides an example of the fertility rate calculation performed for Bronx County.

Comparisons of NYC ASFRs in Figure 3-5 shows that Manhattan displays a noticeable lower fertility rate for younger age cohorts relative to the remaining four boroughs of the city. The two boroughs that had the highest overall fertility, the Bronx and Brooklyn, also had the highest age-specific fertility rates for those ages 20-24. Alternatively, Queens and Staten Island followed a more “suburban” fertility pattern, with moderate overall levels, and rates peaking at ages 30-34 for both boroughs.

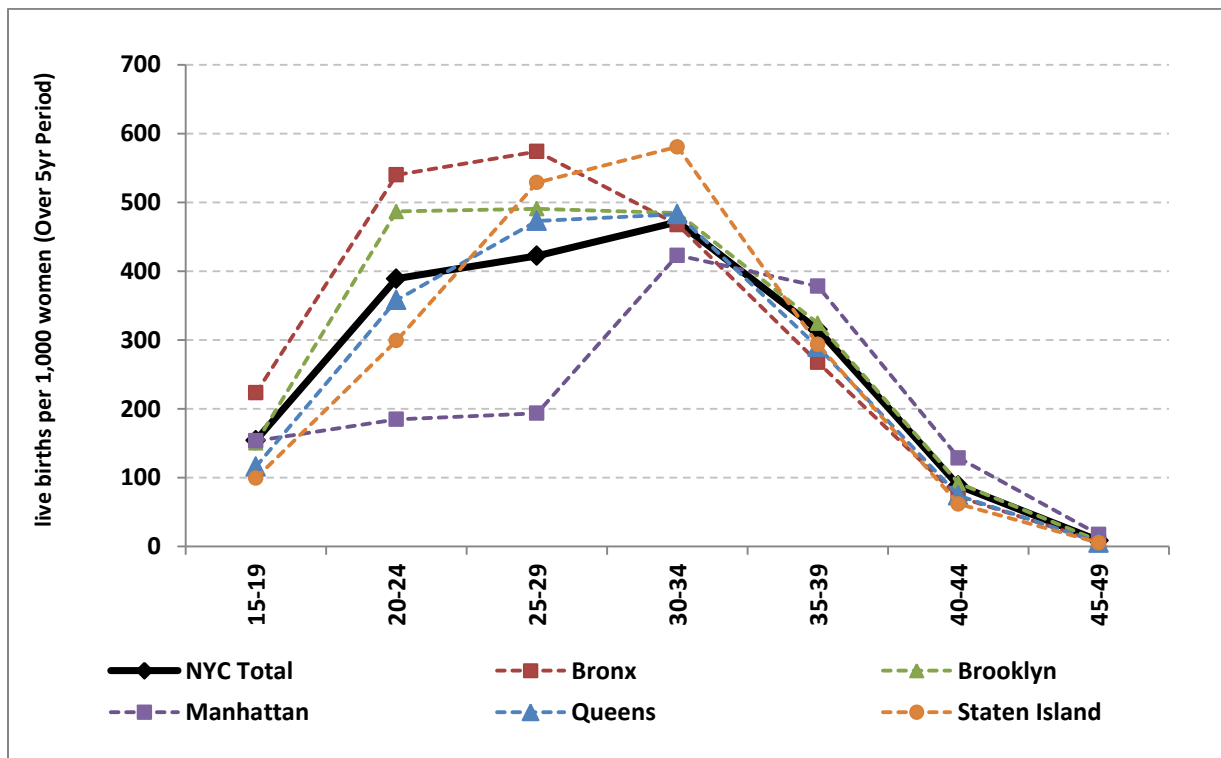
Since the baby boom ended in the 1960s, New York City has experienced a fairly steady decline in fertility rates that has continued to fall through the 2000s. Given these low fertility rates and the difficulties inherent in projecting fertility, 2008-2010 fertility rates will be held constant for the entire 2010-2050 period. Since the aggregate number of births is the result of both fertility rates and the number of women in the childbearing ages, the number of births may increase in some years, despite unchanging or even declining fertility rates.³²

Adjusting the TFR permits the adjustment of overall rates for women in all age groups (scaling them up or down, but maintaining the overall relative pattern of ASFRs), while adjustments to the age-specific fertility rates permits the selection of alternative fertility rates for particular age groups.

TABLE 3-1. EXAMPLE CALCULATION OF BRONX COUNTY ASFRs

Bronx	3-Year Average	2008	Births 2009	2010	Female-NS Population 2010	Age-Specific Fertility Rate
15-19	2,426	2,555	2,448	2,275	54,332	0.223270
20-24	5,808	5,906	5,840	5,677	53,768	0.540068
25-29	6,272	6,390	6,343	6,084	54,640	0.573940
30-34	4,879	4,774	4,930	4,932	52,168	0.467619
35-39	2,599	2,595	2,628	2,575	48,592	0.267481
40-44	730	723	738	729	50,826	0.071819
45-49	67	68	67	66	52,088	0.006432
Total	22,781	23,011	22,995	22,338	366,414	2.150629

FIGURE 3-5. NEW YORK CITY AGE-SPECIFIC FERTILITY RATES BY BOROUGH, 2010

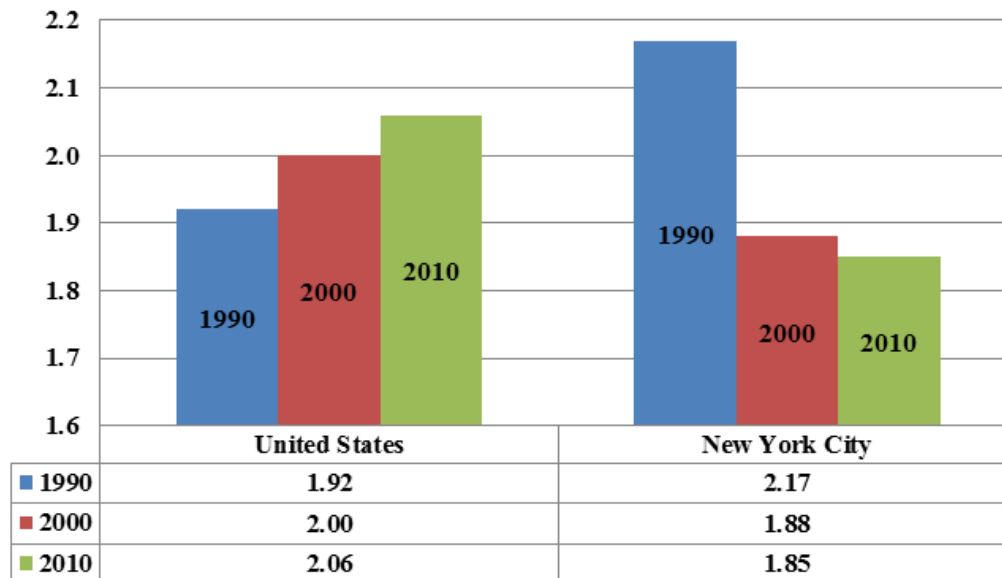


In 1990 New York City's TFR was above that of the nation (2.2 vs. 1.9), but since then, the city's TFR has declined, while that of the nation has increased (Figure 3-6). By 2010, the city's TFR was lower than that of the nation (1.9 vs. 2.1 for the U.S.).

Given the relatively low TFR for the city in 2010, the 2010 age-specific and total fertility rates were held constant for the entire 2010-2050 period, rather than project continued declines (See Appendix A for details). As an exercise, alternative ASFRs were applied in the model as part of a sensitivity analysis

testing the impact of ASFR assumptions on total population projections. This assessment (Section 3.2.3) found a negligible impact of ASFR assumptions on total population.

FIGURE 3–6. U. S. AND NEW YORK CITY TOTAL FERTILITY RATES, 1990–2010



3.2.1.2 Survival Rates

As with births, deaths were averaged for 2008, 2009, and 2010 to calculate age-specific death rates based on the 2010 population. Data on deaths were obtained from the New York City Department of Health and Mental Hygiene, while population data by age were from the decennial census. These age-specific death rates were then used as the foundation for a life table that calculated survival rates by age. These rates represent the percentage of persons who are likely to survive to the next five year time point.

Table 3-2 provides an example of the life table construction based on the procedures briefly described in Section 3.2.1.2, and the subsequent calculation corresponding age-specific survival rates. The conversion of ASDRs (${}_nM_x$ in the table) to corresponding probabilities of dying (${}_nq_x$ in the table) is performed using Equation 3-3 as previously described with an ${}_na_x$ assumption of 0.5 for all age groups. Survival rates calculated through a life table are not precisely the proportion surviving to the next age group. Instead, the life table determines survival in terms of life expectancy and person years lived within an interval against all remaining intervals. This is because each age group is not subject to the exact same chances of dying, since people are distributed throughout the age group. For instance, the 0-4 year old age group is not merely comprised of infants at the beginning of the projection. Rather, it includes infants, 1, 2, 3, and 4 year olds alike. This is why a simple proportion cannot be applied to each age group – people are moving to the next age group before the five year period has concluded and are thus subject to a different probability of dying.

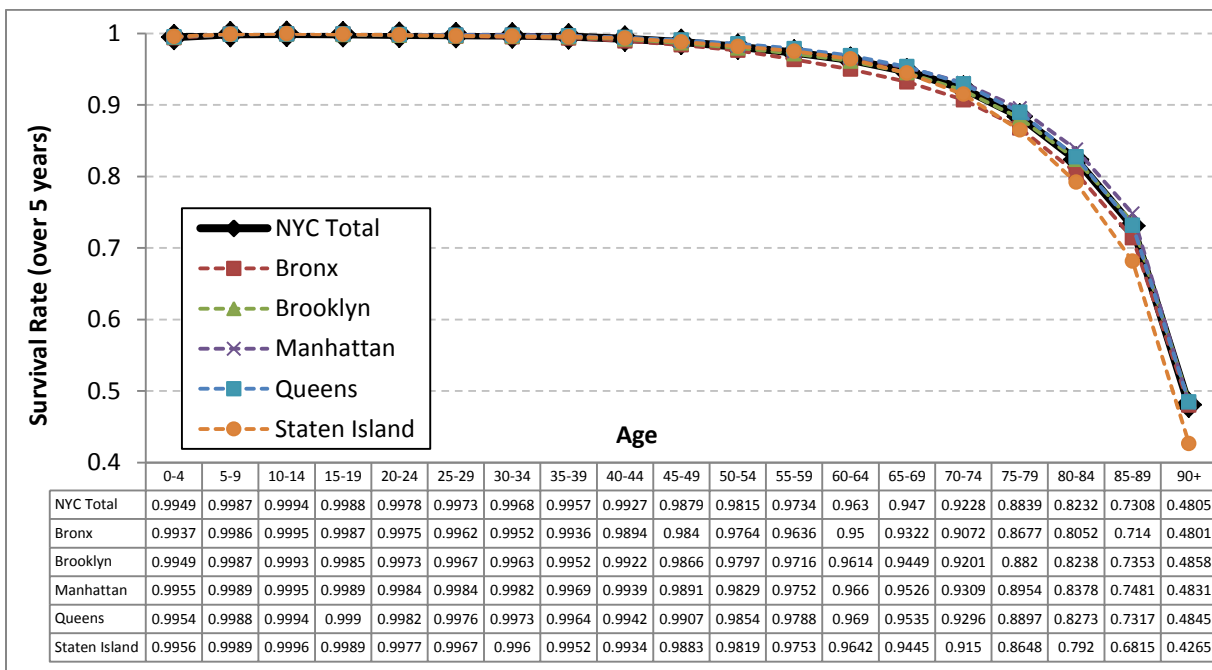
The initial survival rates, which were employed for the 2010-2020 period, follow a very traditional pattern of high probability of survival for the younger ages, with very little attrition until ages 55-59 (Figure 3-7). Thereafter, the probability of survival begins to fall, declining steeply for the older age groups. Survival rates in the Bronx were minimally lower than those for other boroughs. While Figure

3-7 shows age-specific survival rates for both men and women combined, the cohort component model used in this analysis actually applies rates that are both age/sex-specific. This permitted the projection of population by age and sex.

TABLE 3-2. EXAMPLE CONSTRUCTION OF BRONX COUNTY 2010 MALE LIFE TABLE & SURVIVAL RATE CALCULATION

BRONX, MALES												
Period of Life	Interval (n)	Separ. Factor a(x)	Pop P(x)	Deaths D(x)	ASDR M(x)	Prop. Dying in Interval Q(x)	Persons Alive at Age x l(x)	Deaths During Interval d(x)	---Years Lived--- During Interval sLx	In All Later Ages Tx	Lifetime Remaining At Age x E(x)	Survival Rate Calculation
0-1	1	0.5	10700	76	0.00707	0.007047	100000	705	99648	7556842	75.6	Births
1-4	4	0.5	41781	7	0.00018	0.000702	99295	70	397042	7457194	75.1	0-4
5-9	5	0.5	50271	8	0.00015	0.000762	99226	76	495939	7060152	71.2	5-9
10-14	5	0.5	50693	6	0.00012	0.000592	99150	59	495603	6564213	66.2	10-14
15-19	5	0.5	59451	35	0.00059	0.002967	99091	294	494722	6068610	61.2	15-19
20-24	5	0.5	56609	53	0.00093	0.004641	98797	459	492840	5573888	56.4	20-24
25-29	5	0.5	49741	63	0.00126	0.006280	98339	618	490150	5081048	51.7	25-29
30-34	5	0.5	44868	64	0.00143	0.007107	97721	694	486870	4590897	47.0	30-34
35-39	5	0.5	41799	84	0.00202	0.010037	97027	974	482699	4104027	42.3	35-39
40-44	5	0.5	44514	156	0.00350	0.017334	96053	1665	476102	3621328	37.7	40-44
45-49	5	0.5	44690	214	0.00478	0.023623	94388	2230	466366	3145226	33.3	45-49
50-54	5	0.5	40146	315	0.00785	0.038517	92158	3550	451917	2678860	29.1	50-54
55-59	5	0.5	32476	410	0.01262	0.061192	88609	5422	429488	2226943	25.1	55-59
60-64	5	0.5	26607	400	0.01505	0.072504	83186	6031	400854	1797456	21.6	60-64
65-69	5	0.5	19009	427	0.02248	0.106422	77155	8211	365248	1396602	18.1	65-69
70-74	5	0.5	14093	429	0.03042	0.141337	68944	9744	320360	1031354	15.0	70-74
75-79	5	0.5	9842	438	0.04450	0.200238	59200	11854	266364	710994	12.0	75-79
80-84	5	0.5	6657	459	0.06890	0.293879	47346	13914	201944	444630	9.4	80-84
85-89	5	0.5	3854	393	0.10189	0.406011	33432	13574	133225	242686	7.3	85-89
90-94	5	0.5	1345	225	0.16753	0.590393	19858	11724	69980	109462	5.5	90-94
95+	5	0.5	487	100	0.20602	1.000000	8134	8134	39481	39481	4.9	95+

FIGURE 3-7. NEW YORK CITY SURVIVAL RATES BY AGE AND BOROUGH, 2010



Survival rates were increased for each age group/borough starting in 2020, by applying one-half of the percentage improvements in age-specific survival anticipated by the United States Social Security Administration (SSA). The *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum shows that over the last two decades, the 31-County Forecast Region, and

New York City in particular, had experienced significantly higher increases in life expectancy than the Nation as a whole. Given that the city's life expectancy in 2010 already exceeded the national average, and in light of the substantial improvements relative to the nation, it was deemed unrealistic to assume that New York City's life expectancy would increase at the same rate as that of the nation.

Therefore to include an adjustment without increasing the city's survival rates to an unreasonable extent, only 50 percent of the increases in national survival rates were applied to each borough's rates. The use of 50 percent represented a middle ground between the baseline rates (no improvement) and adoption of the full national increase in survival (100 percent of the national increase). Using life tables developed by the SSA, estimates of improvement in survival rates were calculated as demonstrated in Table 3-3.

TABLE 3-3. PERCENT INCREASE IN NATIONAL SURVIVAL RATE CALCULATION

Male												
Life Table	Survives											
Age	to Age	2010	2020	Percent Change		2020	2030	Percent Change		2030	2040	Percent Change
Births	0-4	0.993848	0.994886	0.104%		0.994886	0.995700	0.082%		0.995700	0.996372	0.067%
0-4	5-9	0.998870	0.999059	0.019%		0.999059	0.999171	0.011%		0.999171	0.999280	0.011%
5-9	10-14	0.999174	0.999271	0.010%		0.999271	0.999382	0.011%		0.999382	0.999458	0.008%
10-14	15-19	0.997459	0.997699	0.024%		0.997699	0.997883	0.018%		0.997883	0.998066	0.018%
15-19	20-24	0.994936	0.995363	0.043%		0.995363	0.995742	0.038%		0.995742	0.996068	0.033%
20-24	25-29	0.994250	0.994753	0.051%		0.994753	0.995172	0.042%		0.995172	0.995557	0.039%
25-29	30-34	0.994038	0.994563	0.053%		0.994563	0.995026	0.047%		0.995026	0.995431	0.041%
30-34	35-39	0.992003	0.992699	0.070%		0.992699	0.993325	0.063%		0.993325	0.993880	0.056%
35-39	40-44	0.988115	0.989104	0.100%		0.989104	0.990059	0.097%		0.990059	0.990938	0.089%
40-44	45-49	0.982619	0.984152	0.156%		0.984152	0.985604	0.148%		0.985604	0.986894	0.131%
45-49	50-54	0.976271	0.978552	0.234%		0.978552	0.980506	0.200%		0.980506	0.982223	0.175%
50-54	55-59	0.966064	0.969412	0.347%		0.969412	0.972148	0.282%		0.972148	0.974513	0.243%
55-59	60-64	0.947481	0.952500	0.530%		0.952500	0.956608	0.431%		0.956608	0.960175	0.373%
60-64	65-69	0.917240	0.924469	0.788%		0.924469	0.930421	0.644%		0.930421	0.935658	0.563%
65-69	70-74	0.871963	0.882236	1.178%		0.882236	0.890959	0.989%		0.890959	0.898644	0.862%
70-74	75-79	0.806904	0.821719	1.836%		0.821719	0.834615	1.569%		0.834615	0.846024	1.367%
75-79	80-84	0.707670	0.727928	2.863%		0.727928	0.746527	2.555%		0.746527	0.763216	2.236%
80-84	85-89	0.564228	0.586554	3.957%		0.586554	0.608749	3.784%		0.608749	0.629196	3.359%
85+	90+	0.324127	0.339587	4.770%		0.339587	0.357399	5.245%		0.357399	0.374775	4.862%

Half of the national life expectancy change was applied to each of the boroughs by age and sex (Table 10). Starting with the original 2010 survival rate calculations, 50 percent of the change that occurred between 2010 and 2020 at the national level was applied to the 2020 borough survival rates. This was repeated for each decade, while holding the five year time point between decades constant as shown by the example of Bronx Male survival rates presented in Table 3-4.

TABLE 3-4. APPLYING U. S. SURVIVAL RATE INCREASES EXAMPLE CALCULATION

MALE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Appendix B of this report documents the resulting age/sex-specific survival rates applied in the New York City population forecast model. Similar to the approach taken with future ASFR's, alternative proportions of the national survival rate increases were applied in the model as part of a sensitivity test (Section 3.2.3).

3.2.1.3 Migration Rates

Since migration is the most volatile component, age-specific and crude migration rates (CMRs) were averaged over a 20 year period, using decennial census data from 1990-2000 and 2000-2010.

For all but the youngest age groups, net migration is derived as a residual by applying mortality rates and "surviving" an enumerated population, yielding an "expected" population for each age/sex group five years later. For example, some number of 45-49 year olds in 2005 will survive to ages 50-54 in 2010. This expected population of 50-54 year olds is then compared to the observed or actual population of 50-54 year olds in 2010; the difference, or residual, is net migration (top section of Table 3-5).

For each decade, migration rates were calculated for a 5 year period and then averaged to create the rate for the entire decade. The rates for 1990-2000 and 2000-2010 were then averaged to create a rate for the entire 1990-2010 period (bottom section of Table 3-5).

TABLE 3-5. NET MIGRATION BY AGE EXAMPLE CALCULATION

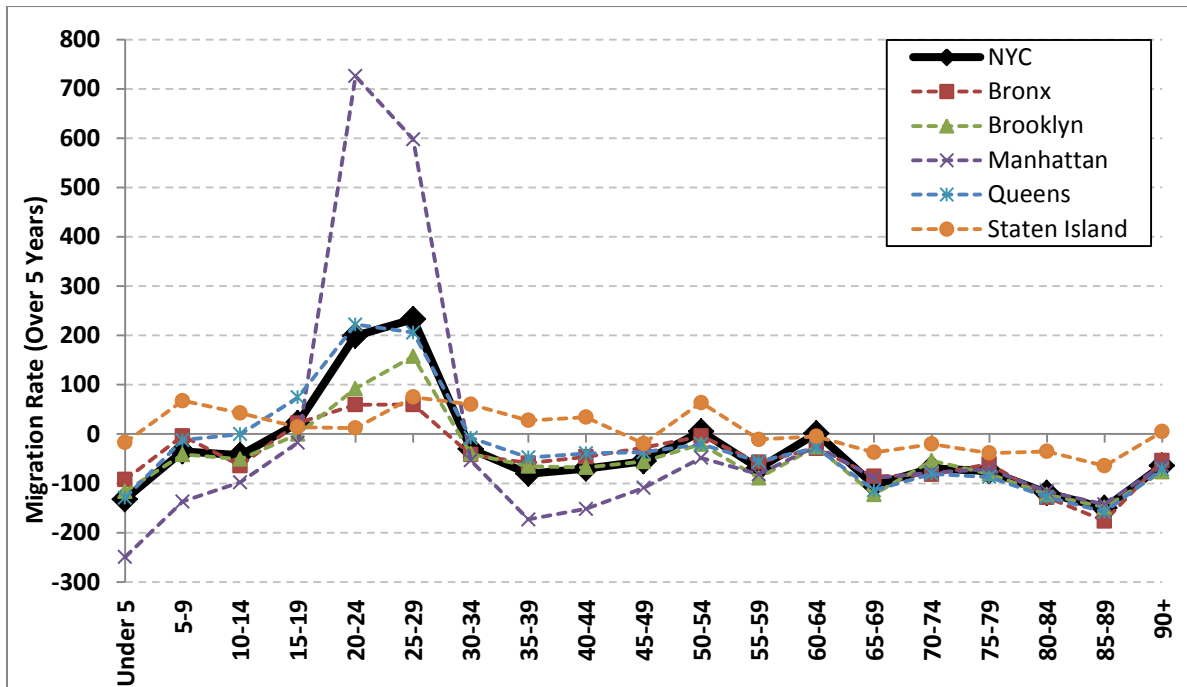
BRONX, MALES																	
	Total	2000	2000					2000-2005				2010	2005-2010				
Age	2000	Special	Hhold	5-yr	2005	2005		Net Migrants	5-yr		Age	2010	Hhold	Net Migration	Migration	Migration	
2000	Popul	Popul	Popul	Survival	Age	Expected	Actual	Number	Rate	Survival	2010	Expected	Popul	Number	Rate	Age	Rate Average
Births 95-00	57,982									0.993379	Under 5	57,598	51,494	-6,104	-0.10528	Births	-0.086284
Births 90-95	57,514		57,514	0.993379	Under 5	57,134	53,264	-3,870	-0.06729	0.998489	5-9	53,183	49,764	-3,419	-0.06419	Under 5	-0.030131
Under 5	55,807	-774	55,033	0.998489	5-9	54,950	55,166	216	0.00393	0.999323	10-14	55,129	50,265	-4,864	-0.08816	5-9	-0.111444
5-9	61,021	-453	60,568	0.999323	10-14	60,527	52,367	-8,160	-0.13472	0.998221	15-19	52,274	56,181	3,907	0.07461	10-14	0.016779
10-14	54,992	-523	54,469	0.998221	15-19	54,372	52,136	-2,236	-0.04105	0.996197	20-24	51,938	51,947	9	0.00018	15-19	-0.001706
15-19	51,528	-3437	48,091	0.996197	20-24	47,908	47,736	-173	-0.00359	0.994542	25-29	47,475	47,010	-465	-0.00974	20-24	0.020795
20-24	47,722	-4198	43,524	0.994542	25-29	43,286	45,521	2,234	0.05133	0.993308	30-34	45,216	42,873	-2,343	-0.05147	25-29	-0.011754
25-29	46,600	-2569	44,031	0.993308	30-34	43,736	44,968	1,231	0.02796	0.991433	35-39	44,582	40,122	-4,460	-0.09919	30-34	-0.085742
30-34	49,945	-2883	47,062	0.991433	35-39	46,659	43,257	-3,402	-0.07229	0.986333	40-44	42,665	42,437	-228	-0.00528	35-39	-0.047125
35-39	49,344	-2953	46,391	0.986333	40-44	45,757	41,630	-4,127	-0.08897	0.979549	45-49	40,778	42,566	1,788	0.04295	40-44	0.003044
40-44	43,079	-2257	40,822	0.979549	45-49	39,987	38,483	-1,505	-0.03686	0.969019	50-54	37,290	38,528	1,238	0.03216	45-49	0.029857
45-49	35,911	-1512	34,399	0.969019	50-54	33,333	34,281	948	0.02755	0.950368	55-59	32,580	31,347	-1,233	-0.03595	50-54	-0.036362
50-54	31,075	-1041	30,034	0.950368	55-59	28,543	27,439	-1,104	-0.03677	0.933331	60-64	25,610	25,777	167	0.00610	55-59	0.016049
55-59	24,275	-744	23,531	0.933331	60-64	21,962	22,574	612	0.02600	0.911175	65-69	20,569	18,244	-2,325	-0.10299	60-64	-0.078116
60-64	20,060	-689	19,371	0.911175	65-69	17,650	16,619	-1,031	-0.05324	0.877102	70-74	14,577	13,345	-1,232	-0.07411	65-69	-0.053968
65-69	15,638	-644	14,994	0.877102	70-74	13,151	12,644	-507	-0.03883	0.831452	75-79	10,513	9,118	-1,395	-0.11032	70-74	-0.094201
70-74	12,731	-788	11,943	0.831452	75-79	9,930	8,998	-933	-0.07808	0.758151	80-84	6,821	5,933	-888	-0.09875	75-79	-0.115307
75-79	9,646	-769	8,877	0.758151	80-84	6,730	5,560	-1,171	-0.13187	0.659712	85-89	3,668	3,216	-452	-0.08124	80-84	-0.124241
80-84	5,827	-641	5,186	0.659712	85-89	5,231	4,364	-867	-0.16724	0.451041	90+	1,968	1,499	-469	-0.10755	85+	-0.107549
85+	4,970	-957	4,013	0.451041													
Total	620,171	-27,832	649,853			630,848	607,003	-23,846	-0.03669			644,433	621,666	-22,767	-0.03751		-0.0384

Bronx- Male					Migration	
	1990-1995	1995-2000	2000-2005	2005-2010	Age at Start of Period	1990-2010
Births					Births	-0.094
Under 5	-0.149	-0.055	-0.067	-0.105	Under 5	-0.003
5-9	-0.032	0.082	0.004	-0.064	5-9	-0.063
10-14	-0.018	-0.012	-0.135	-0.088	10-14	0.016
15-19	0.044	-0.014	-0.041	0.075	15-19	0.010
20-24	0.074	-0.029	-0.004	0.000	20-24	0.029
25-29	0.086	-0.014	0.051	-0.010	25-29	-0.051
30-34	-0.130	-0.051	0.028	-0.051	30-34	-0.073
35-39	-0.094	-0.026	-0.072	-0.099	35-39	-0.053
40-44	-0.062	-0.057	-0.089	-0.005	40-44	-0.034
45-49	-0.065	-0.076	-0.037	0.043	45-49	-0.006
50-54	-0.046	-0.039	0.028	0.032	50-54	-0.064
55-59	-0.071	-0.112	-0.037	-0.036	55-59	-0.028
60-64	-0.054	-0.090	0.026	0.006	60-64	-0.106
65-69	-0.128	-0.141	-0.053	-0.103	65-69	-0.080
70-74	-0.123	-0.087	-0.034	-0.074	70-74	-0.060
75-79	-0.015	-0.038	-0.078	-0.110	75-79	-0.121
80-84	-0.114	-0.139	-0.132	-0.099	80-84	-0.144
85-89	-0.200	-0.128	-0.167	-0.081	85+	-0.080
90+		-0.053		-0.108		

Since it is calculated as a residual, any estimate of net migration will include errors associated with population coverage. This can manifest itself in the form of unusual changes in net migration rates among successive age/sex groups. In Brooklyn and Queens, volatility was observed in net migration rates among persons between the ages of 45 and 59, which was characterized by big shifts in the direction of rates for successive age groups. As a result, age cohorts that historically had net outflows and declined as they moved across the age spectrum were now erroneously seeing net inflows and were increasing in size as they aged. These effects were dampened by averaging the rates for adjacent age groups. This has the effect of smoothing rates in the middle/upper ages, making for a scenario that was likely less sensitive to anomalies in the coverage of age/sex groups in the census enumeration.

The 1990-2010 migration rates Table 3-8) show that with the exception of a small inflow for ages 15-29, the Bronx had negative migration for all of its age groups. The rates in Brooklyn and Queens for the young age groups were more than twice that of the Bronx. In comparison, Manhattan had an extraordinarily positive net migration rate for those 20-29. Manhattan also had among the highest rates of out-migration for most age groups thereafter. Staten Island, unlike the other boroughs, had positive migration rates for a majority of its age groups, especially those groups of people younger than 55 years old. In all of the boroughs, migration rates in the older age groups showed greater out-migration than in the younger age groups.

FIGURE 3-8. NEW YORK CITY AGE-SPECIFIC MIGRATION RATES BY BOROUGH, 1990-2010



While overall rates of migration vary by borough, there are age-specific patterns that hold across boroughs. For example, with the exception of Staten Island, all boroughs have a net outflow for those under the age of 5, as new parents often leave for the suburbs to raise children. In contrast, migration rates are positive for those ages 20-29 in each borough. Among those ages 30-54, migration rates tend to be close to zero, with the notable exception of Manhattan, which has a sizable outflow, especially for those ages 30-49. For those ages 55-89, migration rates are negative for all boroughs.

The overall migration dynamic is captured by the CMR. As with the age-specific net migration rates, for the entire 1990-2010 period, the total number of net migrants was divided by the initial population to create a crude migration rate for each 5 year period and then averaged to arrive at the rate for the entire 1990-2010 period (Table 3-6). A positive CMR for a borough indicates that those moving in outnumber those who leave, while the reverse is true if the rate is negative. While the age-structure of migration can be altered by changing age-specific rates, adjusting the overall CMR changes migration rates across all age groups while maintaining the overall pattern of migration by age.

TABLE 3-6. BASELINE CMR CALCULATION 1990-2010

TOTAL	1990-1995	1995-2000	2000-2005	2005-2010	AVG_90-10
New York City	-0.021	-0.013	-0.030	-0.029	-0.023
Bronx	-0.041	-0.028	-0.036	-0.034	-0.035
Brooklyn	-0.041	-0.031	-0.032	-0.033	-0.034
Manhattan	-0.034	-0.028	-0.024	-0.022	-0.027
Queens	0.017	0.018	-0.035	-0.033	-0.008
Staten Island	0.035	0.043	-0.004	0.000	0.019

MALE	1990-1995	1995-2000	2000-2005	2005-2010	AVG_90-10
New York City	-0.027	-0.021	-0.033	-0.034	-0.028
Bronx	-0.050	-0.042	-0.037	-0.038	-0.042
Brooklyn	-0.048	-0.042	-0.033	-0.037	-0.040
Manhattan	-0.038	-0.035	-0.033	-0.033	-0.035
Queens	0.012	0.015	-0.035	-0.035	-0.011
Staten Island	0.027	0.039	-0.006	-0.002	0.014

FEMALE	1990-1995	1995-2000	2000-2005	2005-2010	AVG_90-10
New York City	-0.012	-0.005	-0.025	-0.025	-0.017
Bronx	-0.026	-0.016	-0.031	-0.031	-0.026
Brooklyn	-0.028	-0.021	-0.027	-0.029	-0.026
Manhattan	-0.027	-0.022	-0.012	-0.012	-0.018
Queens	0.019	0.021	-0.031	-0.032	-0.006
Staten Island	0.037	0.048	-0.002	0.003	0.021

3.2.2 New York City Populations Incorporating Land Use Assumptions

The Project Team needed to ensure that the population and housing projected in this analysis could be reasonably accommodated, given the city's current land use and zoning. In addition to land use and zoning constraints, high population densities, fixed political boundaries, and the high cost of residential construction also act to limit population growth. This model is thus sensitive to the opportunities and constraints related to changes in each borough's land use, zoning, and the production of housing. This is what we call the planning component of our demographic model. This analysis was done for 2020, 2040, and for 2050.

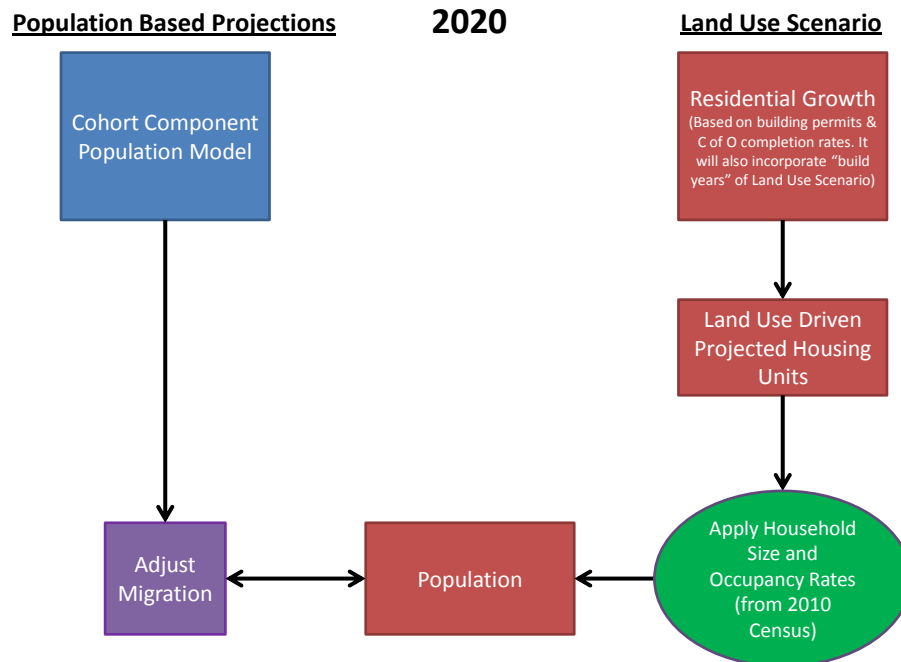
3.2.2.1 2020 Planning Component

Crude migration rates were adjusted from 2010 to 2020 based on an approach that examined actual housing data that exists for part of the 2010-2020 period. Total Population can be derived from housing units based on the following:

$$\text{Population} = (\text{Occupied Housing Units} * \text{Average Household Size}) + \text{Persons in Group Quarters}$$

Figure 3-9 shows the overall methodology used to create a projected 2020 population. The approach takes advantage of the fact that actual population and housing data exist for part of the 2010-2020 period.

FIGURE 3-9. 2020 POPULATION PROJECTION METHODOLOGY



A 2020 housing target was created that used three inputs from the NYC Department of Buildings:

- New building permits with residential units (issued between 2005 and 2012)
- Demolition permits for residential buildings (issued between 2005 and 2012)
- Certificates of Occupancy (C of Os) for residential units (issued between 2005 and 2013)

Data on the total number of housing units permitted, demolished or occupied comes with the date and address of each action. For each year, the net number of planned housing units is determined by subtracting the number of demolished units from the new units permitted. Unique identifiers in the building permit and C of O tables make it possible to track the time elapsed between the issuing of a building permit for a particular project and the occupancy of the new units. Using the net number of units planned in a given year and the average time it takes for new units to receive a C of O, a completion rate is calculated and used to estimate the number of units completed up to 2020 for each borough.

Post-2010 data tracking the net increase of housing units are available through 2012. Since C of O and demolition data were available for only the first six months of 2013, the net number of new units was doubled to estimate the net increase of housing units in 2013. To estimate the increase of housing units from 2014 to 2020, the average annual number of new units from 2005 to 2012 was applied to each year, and the historic completion rates were used to determine the number of new units that would actually be built each year between 2014 and 2020. The actual number of additional units from 2010 to 2013 was summed, along with the projected number of completions from 2014 to 2020, to obtain the number of housing units for the 2010-2020 period. These calculations are shown using Brooklyn as an example in Table 3-7. The total number of potential housing units added to each borough between 2010 and 2020 is shown in Table 3-8.

TABLE 3-7. 2020 HOUSING TARGET TABLE FOR BROOKLYN

Year	Permits Issued (Units)	Demos (Units)	NET Units	Competition rates based on C of Os (2005-12)														
				Up to 1 yr	2 year	3 year	4 year	5 year	6 + years	Total								
2000	3,062	356	2,706	0.9%	3.2%	28.1%	25.8%	13.2%	7.8%	79.0%								
2001	2,900	413	2,487															
2002	5,247	512	4,735															
2003	6,275	532	5,743															
2004	7,003	707	6,296															
2005	9,114	1,016	8,098															
2006	8,617	1,056	7,561															
2007	10,459	734	9,725															
2008	12,430	357	12,073															
2009	1,508	103	1,405															
2010	1,717	238	1,479															
2011	1,415	387	1,028															
2012	3,347	193	3,154															
2013	2,180		2,180															
2005-12 Average Units =			5,565															2010-20 Sum of New Housing Units
Permit year	C of O year																	
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20			
2005	8,098	116	536	3,041	2,788	1,133	733											
2006	7,561		134	460	2,363	2,631	1,013	1,031										
2007	9,725			72	255	2,206	2,903	1,959	1,063									
2008	12,073				45	55	2,676	2,490	1,660	944								
2009	1,405					-	9	569	230	185	110							
2010	1,479						6	13	1,082	382	195	116						
2011	1,028							16	53	288	266	136	80					
2012	3,154								4	100	885	815	416	247				
2013	4,360									38	138	1,223	1,127	576	341			
2014	5,565										49	177	1,561	1,438	735	435		
2015	5,565											49	177	1,561	1,438	735		
2016	5,565												49	177	1,561	1,438		
2017	5,565													49	177	1,561		
2018	5,565														49	177		
2019	5,565															49		
						7,195	4,531	3,611	2,312	1,643	2,515	3,410	4,047	4,301	4,395	37,961		

TABLE 3-8. TOTAL NUMBER OF POTENTIAL HOUSING UNITS 2010-2020

	Additional Housing Units by 2020
New York City	128,501
Bronx	23,668
Brooklyn	37,961
Manhattan	29,363
Queens	30,342
Staten Island	7,167

3.2.2.2 2040 & 2050 Planning Components

The planning component, done with local knowledge of each borough, consists of four categories of opportunities for future growth. These categories are discussed in further detail on the following pages.

- DCP initiatives/re-zonings
- Large private applications
- Large public site projects

- Areas of opportunity and background growth

Similarly, the analysis considers constraints in the boroughs that could prevent growth from occurring including carrying capacity of the infrastructure (existing water supply and sewer capacity); land development needs of public facilities, including schools, parks, libraries, police, and fire departments; and zoning that prohibits residential development.

The first three categories of the residential land use scenario outlined above, require few assumptions, since all of the rezoning areas and sites are required to provide unit counts for public review as well as on their site plans, as they go through the approval process and/or become adopted and certified. These housing units were utilized as a guide to potential new housing units to be developed by 2050. The fourth category is more uncertain and assumptions need to be made in order to determine new housing unit potential, especially for areas that haven't experienced a change in zoning or public/private applications.

Each development or opportunity identified in the planning component was accompanied by the projected number of housing units that would be built on completion. The number of housing units was then summed for each borough and, using current occupancy rates and average household size, a population associated with the projected number of housing units in 2050 was derived.

3.2.2.2.1 DCP Initiatives/Rezoning (enacted between 1/1/2002 & 1/1/2014)

This category quantifies the amount of new housing units that are projected as a result of Department of City Planning adopted re-zonings. Increased housing is expected in areas that have been up-zoned to permit larger residential buildings or re-zoned to permit residential uses where they were previously not permitted.

Every rezoning undertaken by DCP is required to follow the Uniform Land Use Review Procedure. It is also a requirement that an environmental review be conducted, which mandates that there be an evaluation of the number of new housing units potentially resulting from the change. A re-zoning's development scenario table provides detailed information regarding where and when projected increases in housing may occur as a result of the change in zoning. Projected housing units were summed for all rezonings adopted since 2002 and used in creating the 2020 benchmark. However, a large percentage of housing growth resulting from re-zonings is expected to occur after 2020; these units were factored into the 2050 benchmark.

Figure 3-10 lists the DCP initiatives and re-zonings in New York City approved between 2002 and 2014 that allow for increased residential bulk. Table 3-9 shows the total number of new housing units projected to be added beyond 2020.

TABLE 3-9. NEW HOUSING UNITS GENERATED FROM DCP INITIATIVES/RE-ZONINGS

	Total Projected Housing Units	Units beyond 2020
New York City	114,700	51,300
Bronx	15,000	8,100
Brooklyn	30,300	12,000
Manhattan	36,500	15,800
Queens	28,400	15,400
Staten Island	4,500	-

FIGURE 3-10. DCP INITIATIVES/RE-ZONINGS (2002-2014)

Bronx 161st Street/River Avenue Central Riverdale & Spuyten Duyvil Hunts Point Special District and Rezoning Lower Concourse Morrisania Pelham Bay Pelham Gardens Pelham Parkway/Indian Village Port Morris/Bruckner Blvd Third Avenue/East Tremont Avenue Van Cortlandt Village Wakefield/Eastchester Webster Ave/Bedford Park/Norwood Westchester Square Williamsbridge/Baychester Manhattan 125th Street Corridor East Harlem East Village/Lower East Side Far West Village Frederick Douglass Blvd (Central/So. Harlem) Hudson Square Hudson Yards Ladies Mile (w/ private applicant) Northern Tribeca Third/Fourth Avenue Corridor Upper West Side Washington/Greenwich Streets West Chelsea West Clinton/11th Ave Rezoning West Harlem Western Railyards	Brooklyn Bay Ridge Bedford-Stuyvesant North Bedford-Stuyvesant South Bensonhurst Boerum Hill Canarsie Coney Island Comp Crown Heights West DUMBO Dyker Heights/Ft. Hamilton Flatbush Fort Greene/Clinton Hill Greenpoint/Williamsburg Greenpoint/Williamsburg Contextual Homecrest Midwood South Park Slope Sunset Park	Queens Astoria Auburndale/Oakland Gardens/Hollis Hills Bayside College Point Dutch Kills East Flushing Glendale/Middle Village Hunters Point Jamaica Jamaica Hill/Hillcrest Kew Gardens/Richmond Hill Laurelton Long Island City Core Maspeth/Woodside Middle Village/Glendale/Maspeth North Corona Rockaway Residential Neighborhoods South Jamaica Special Forest Hills Dist. (AKA FH-Austin St.) St. Albans Sunnyside/Woodside Waldheim Wolkoff/22-44 Jackson Ave Special Permit Woodhaven/Richmond Hill Staten Island Special Stapleton Waterfront District (w/EDC) St. George Special District Rezoning West Shore Study
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3.2.2.2.2 Large Private Applications

This category includes large private developments approved as of 1/1/14, which would generate new housing, based on applications in the Department of City Planning's Housing Pipeline. Some projects that were not approved as of 1/1/14, but were moving towards approval, are also included.

Figure 3-11 lists all the large private developments in New York City approved between 2002 and 2014 that have a residential component. Table 3-10 shows the total number of new housing units resulting from these projects that are projected to be added beyond 2020.

TABLE 3-10. NEW HOUSING UNITS GENERATED FROM LARGE PRIVATE APPLICATIONS

	Total Projected Housing Units	Units beyond 2020
New York City	50,200	16,500
Bronx	2,600	-
Brooklyn	30,400	12,100
Manhattan	12,200	4,400
Queens	4,400	-
Staten Island	600	-

FIGURE 3-11. LARGE PRIVATE APPLICATIONS (2002-2014)

Bronx Crotona Pk/W. Farms	Brooklyn 11 Broadway 155 West Street 164 Kent Ave 209 McGuinness Blvd 29 Flatbush (Dermot) 336 Flatbush Extension 388 Bridge St 470 Vanderbilt Ave 626 Flatbush Avenue 70 Fleet St 74 Wallabout St 755 Kent Ave 77 Commercial 886 Dahill Rd Acacia & Garvey (Fulton St) Atlantic Center 5 Atlantic Yards Avalon Willoughby BAM East Bay Ridge Mixed Use BBP/John St BBP/Pierhouse BK Heights Library Bond St CityPoint	Brooklyn (cont.) Dock St Domino Sugar Elderts Lane Greenpoint Landing Kedem Winery Maple Lanes Myrtle Ave Ocean Dreams Pfizer Site Rheingold Rose Plaza South Williamsburg The Edge The Hub Wythe Ave Queens Flushing Commons/Macedonia Plaza(w/EDC) Halletts Point Rezoning + Special Permit Silvercup Staten Island 125 Edgewater Street/Clifton 135 Edgewater Street/Clifton 191 Edgewater Street/Clifton
Manhattan 625 W 57th St Edison south of Penn Station(M1-6D Zoning) First Ave Properties (ERRC/Con Edison Site) Fordham U Hospital for Special Surgery Expansion MoMA (53 W 53 St) Riverside Center St. Vincent's (Rudin/LIJ) Sugar Hill Two Trees Mercedes House (770 11th Ave) West 61 Street (GLSD)		

3.2.2.2.3 Large Public Site Projects (Approved as of 1/1/14)

These projects are situated on city-owned land, and include projects that will include new housing units from New York City Housing Authority and Department of Housing Preservation and Development, such as:

- NYCHA redevelopment programs
- Rehabilitation
- New housing built on city property
- EDC and HPD projects
- Affordable housing
- Economic development initiatives

Figure 3-12 lists all the large public site projects in New York City approved between 2002 and 2014 that have a residential component. Table 3-11 shows the total number of new housing units resulting from these sites that are projected to be added beyond 2020.

TABLE 3-11. NEW HOUSING UNITS GENERATED FROM LARGE PUBLIC PROJECTS

	Total Projected Housing Units	Units beyond 2020
New York City	26,400	6,700
Bronx	900	-
Brooklyn	6,600	3,600
Manhattan	3,900	1,400
Queens	13,800	1,700
Staten Island	1,200	-

FIGURE 3-12. LARGE PUBLIC SITE PROJECTS (2002-2014)

Bronx Brook Willis University Avenue Consolidated I & II University Avenue Consolidated III University Avenue Consolidated IV Manhattan 1951 Park Ave (w/ HPD) East 125th Street Rezoning (w/EDC) Fabria Houses West 44th St & 11th Av Rezoning (w/HPD)	Brooklyn BAM North BAM South Broadway Triangle (w/HPD) Coney Island Commons (w/HPD) Culver El (w/HPD) Gateway Estates II (w/HPD) Livonia Ave (w/HPD) Navy Green/The Brig (w/HPD)	Queens Arverne East Development (w/HPD) Hunters Point South (w/EDC) Willets Point Redevelopment (w/EDC) Staten Island Bricktown Senior Housing Brielle Ave/Farm Colony (w/EDC) Lighthouse Point Mount Manresa Senior Housing Seaview Senior Housing
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3.2.2.2.4 Areas of Opportunity and Background Growth

Areas of opportunity are areas that could see future housing growth or may be rezoned in future years. They are mostly located along major thoroughfares and are in proximity to mass transit. While the previous three categories are more firm in their accounting of new units, areas of opportunity are less certain regarding when and how many units will be developed. In meeting with our borough planners, we were able to get more insight into these areas and assign a number of potential units that may be created in future years.

The development of new housing units in areas of opportunity is closely tied to the policies set forth in Housing New York: A Five-Borough, Ten-Year Plan. This comprehensive plan to build and preserve 200,000 affordable units will be accomplished in part by rezoning portions of the city where additional residential development may be accommodated. In concert with the release of the Mayor's report, DCP has announced that it will target 15 neighborhoods for up-zoning in the coming year, thereby increasing the city's zoning capacity.

Background growth takes into account underutilized or vacant land located in residential zoning districts, irrespective of the other four categories. In New York City, much of the development that occurs is considered "as-of-right" development, or development that does not have to provide an application or become adopted/certified by in public review. Sites that fall into this category are considered "soft" since they are built to less than 50 percent of their maximum allowable floor area.

The background growth analysis is based on zoning and existing vacant or underutilized status, identified through various tax lot attributes in MapPLUTO 13v3. Developable area on underutilized residential lots is found by comparing the maximum residential floor area ratio (FAR) permitted by zoning in place as of 1/1/2002 with the current built residential FAR on a property. Developable area is then summed to the borough level and converted into a housing unit count by multiplying the developable square footage by 1,000.

Background growth should not be seen as a block-by-block analysis, but rather a way of estimating zoned capacity in gross terms over large areas. Although zoning changes could be made that would modify future capacity, it is too speculative to make large-scale assumptions about such changes and their effects in the present analysis.

Excluded from background growth are the following types of properties, as identified in MapPLUTO:

- lots that are built over 50 percent of maximum capacity under current zoning
- lots less than 2,500 sq ft
- publicly owned land
- lots with rent stabilized buildings

- landmark buildings
- historical districts
- parkland and cemeteries
- one and two family homes in Brooklyn and Queens. Many one and two family homes are owner-occupied and located in low-density areas – it is unlikely that these homes will be redeveloped into larger buildings with more units

The total number of potential housing units for each borough resulting from background growth and development in areas of opportunity between 2020 and 2050 is shown in Table 3-12.

TABLE 3-12. TOTAL NUMBER OF POTENTIAL HOUSING UNITS 2010-2020

	Projected Housing Units, Beyond 2020
New York City	261,900
Bronx	85,800
Brooklyn	94,100
Manhattan	30,900
Queens	40,100
Staten Island	11,100

3.2.2.3 Intersection of Land Use and Migration Patterns

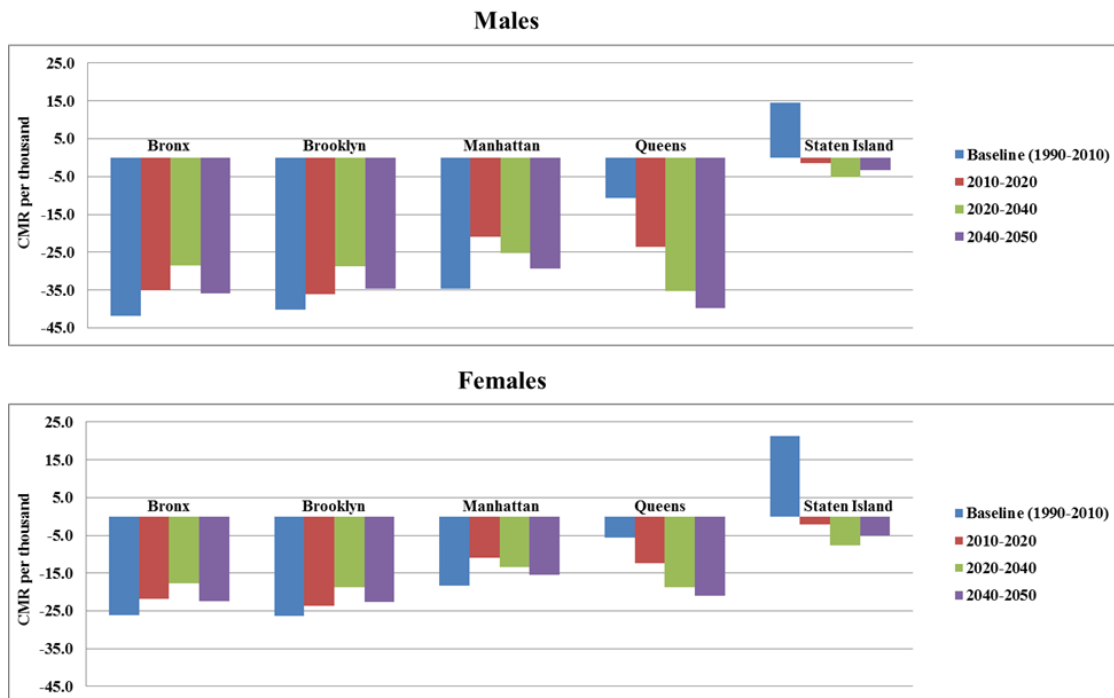
The baseline projection run was completed only using the cohort component model. This is a purely demographic method, meaning that it responds solely to changes in assumptions about fertility, mortality, and migration. By themselves such methods are insufficient for the creation of useful projections, which need to be examined in the context of the city's planning environment. The planning component, discussed earlier, can often dampen the tendency for demographic projections to show linear increases, as the lack of capacity for new residential development acts to constrain growth.

After evaluating the projects in the land use analysis and the number of housing units expected, CMRs were adjusted (Table 3-13 and Figure 3-13) for three periods (2010-2020, 2020-2040, and 2040-2050) to ensure that the projected population could be accommodated given the prospective housing potential in each borough.

TABLE 3-13. ADJUSTED CRUDE MIGRATION RATES (PER THOUSAND)

Borough	Sex	Baseline (1990-2010)	2010-20	2020-40	2040-50
Bronx	Male	-41.72	-35.05	-28.49	-35.98
	Female	-26.08	-21.90	-17.81	-22.49
Brooklyn	Male	-40.11	-36.10	-28.76	-34.74
	Female	-26.23	-23.60	-18.81	-22.72
Manhattan	Male	-34.73	-20.84	-25.26	-29.24
	Female	-18.29	-10.98	-13.30	-15.40
Queens	Male	-10.66	-23.51	-35.25	-39.79
	Female	-5.65	-12.46	-18.68	-21.08
Staten Island	Male	14.46	-1.45	-5.16	-3.40
	Female	21.34	-2.13	-7.62	-5.02

FIGURE 3-13. ADJUSTED CRUDE MIGRATION RATES



The Bronx and Brooklyn, have greater capacity to accommodate growth. As such, CMRs were adjusted in those boroughs to reduce outmigration losses for 2010-2020 and 2020-2040, after which net outflows were increased, as increased population growth could no longer be accommodated. In Manhattan, losses through migration were attenuated between 2010 and 2020, and increased thereafter to 2050. Due to reduced capacity of Queens to accommodate growth given existing land use, its CMRs reflect greater migration losses, compared to its baseline rate. Staten Island actually reverses course, from a positive baseline CMR, to a slightly negative rate for 2010-2020, which stays negative to 2050.

3.2.3 NYC Population Forecast Results

The resulting population forecast model outputs that combine both the cohort component model inputs, the land use planning analysis and resulting modifications to cohort model migration rates are presented in Table 3-14. A more detailed discussion of forecast results is provided in Technical Memorandum 4.

TABLE 3-14. NEW YORK CITY POPULATION FORECASTS

	2010	2015	2020	2025	2030	2035	2040	2045	2050
New York City	8,242,624	8,397,114	8,550,971	8,699,966	8,821,027	8,931,003	9,025,145	9,093,524	9,161,020
Bronx	1,385,108	1,415,725	1,446,788	1,485,275	1,518,998	1,550,492	1,579,245	1,599,597	1,619,344
Brooklyn	2,552,911	2,602,844	2,648,452	2,706,246	2,754,009	2,799,347	2,840,525	2,870,318	2,898,080
Manhattan	1,585,873	1,610,697	1,638,281	1,661,574	1,676,720	1,686,292	1,691,617	1,695,476	1,701,598
Queens	2,250,002	2,289,489	2,330,295	2,353,431	2,373,551	2,394,353	2,412,649	2,425,614	2,438,647
Staten Island	468,730	478,359	487,155	493,440	497,749	500,519	501,109	502,519	503,351

As indicated in the previous sections, a sensitivity analysis of some of the input assumptions (fertility and survival rates) was also conducted as described below.

3.2.3.1 Fertility Rate Sensitivity

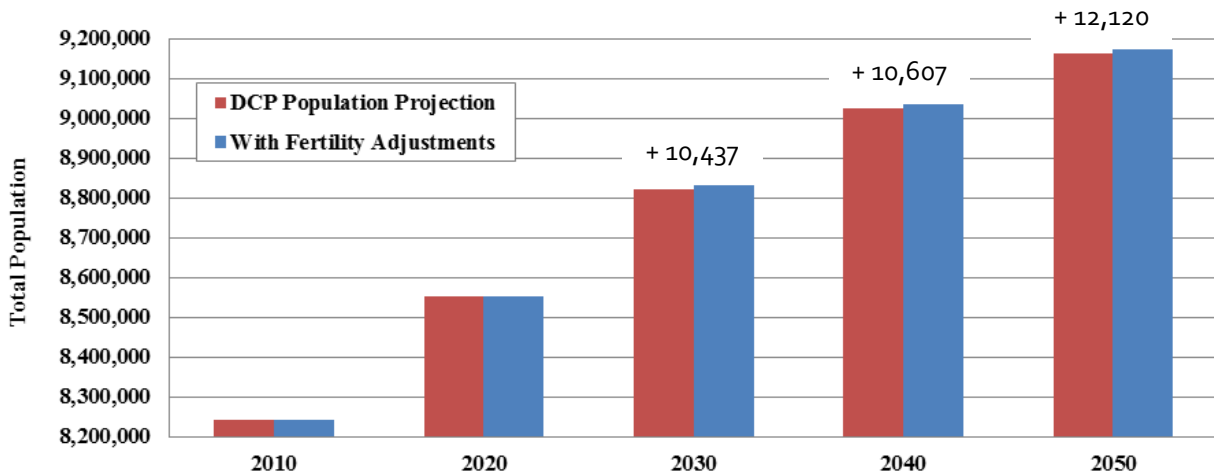
To test the impact of fertility rate assumptions on the New York City forecasts, the 2000 to 2010 absolute change in age-specific and total fertility rates by borough were applied to the 2010 age-specific and total fertility rates (Table 3-15).

These adjusted fertility rates were then applied in the model starting in 2020 and held at the adjusted rate to 2050. The resulting impacts to the population forecasts are presented in Figure 3-14, and show a negligible impact to the overall projected levels.

TABLE 3-15. ALTERNATIVE FERTILITY RATE ASSUMPTIONS

		2000 (1999-2001)	2010 (2008-2010)	Change	Adjusted rates 2020-2050
New York City	15-19	0.219	0.154	-0.065	0.089
	20-24	0.464	0.389	-0.075	0.314
	25-29	0.445	0.422	-0.023	0.399
	30-34	0.429	0.472	0.043	0.515
	35-39	0.249	0.315	0.066	0.381
	40-44	0.066	0.088	0.022	0.111
	45-49	0.005	0.008	0.003	0.012
	TFR	1.878	1.849	-0.029	1.820
Bronx	15-19	0.318	0.223	-0.094	0.129
	20-24	0.608	0.540	-0.068	0.473
	25-29	0.539	0.574	0.035	0.609
	30-34	0.417	0.468	0.050	0.518
	35-39	0.222	0.267	0.045	0.313
	40-44	0.055	0.072	0.017	0.089
	45-49	0.003	0.006	0.004	0.010
	TFR	2.162	2.151	-0.011	2.140
Brooklyn	15-19	0.215	0.150	-0.065	0.086
	20-24	0.555	0.487	-0.068	0.418
	25-29	0.514	0.491	-0.024	0.467
	30-34	0.442	0.484	0.043	0.527
	35-39	0.251	0.324	0.073	0.398
	40-44	0.068	0.092	0.024	0.116
	45-49	0.005	0.008	0.003	0.011
	TFR	2.050	2.036	-0.014	2.022
Manhattan	15-19	0.249	0.154	-0.095	0.058
	20-24	0.290	0.185	-0.105	0.080
	25-29	0.245	0.194	-0.051	0.142
	30-34	0.369	0.423	0.054	0.477
	35-39	0.285	0.378	0.094	0.472
	40-44	0.090	0.129	0.039	0.168
	45-49	0.009	0.017	0.009	0.026
	TFR	1.535	1.479	-0.056	1.423
Queens	15-19	0.158	0.116	-0.042	0.074
	20-24	0.410	0.358	-0.052	0.307
	25-29	0.488	0.473	-0.015	0.458
	30-34	0.451	0.483	0.031	0.514
	35-39	0.241	0.290	0.049	0.339
	40-44	0.057	0.074	0.017	0.091
	45-49	0.004	0.005	0.002	0.007
	TFR	1.808	1.799	-0.009	1.790
Staten Island	15-19	0.129	0.099	-0.030	0.070
	20-24	0.338	0.299	-0.039	0.260
	25-29	0.531	0.529	-0.002	0.527
	30-34	0.546	0.581	0.035	0.615
	35-39	0.241	0.233	0.052	0.346
	40-44	0.049	0.062	0.013	0.074
	45-49	0.002	0.005	0.003	0.009
	TFR	1.836	1.868	0.032	1.900

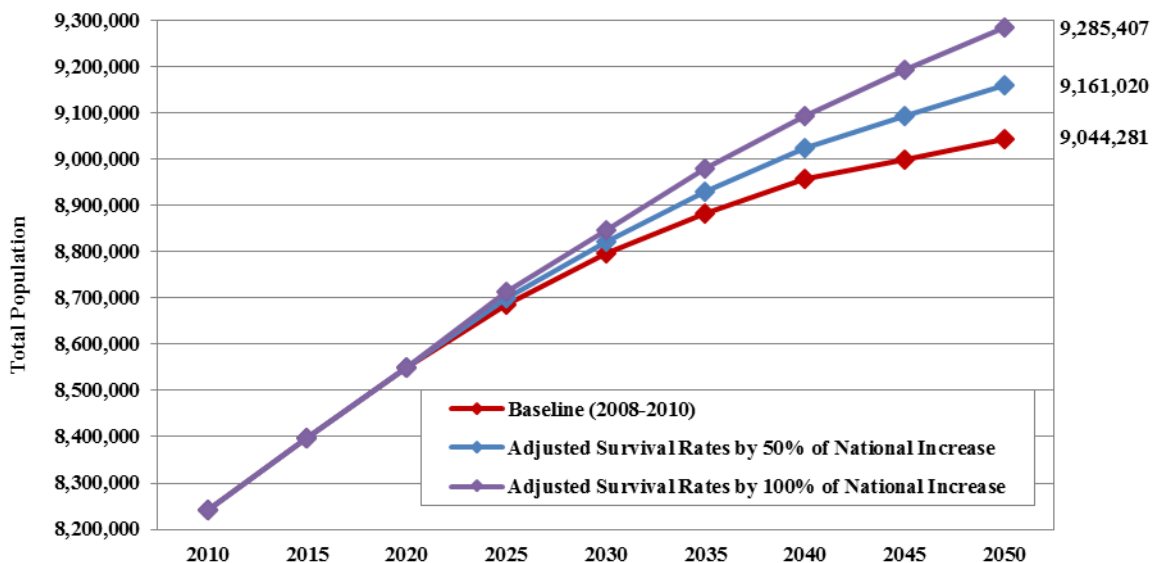
FIGURE 3-14. NYC TOTAL POPULATION OUTPUT USING FERTILITY RATE ADJUSTMENTS



3.2.3.2 Survival Rate Sensitivity

Similarly, the sensitivity of the population forecasts to survival rate assumptions was also tested. As discussed in Section 3.2.1.2, the baseline population projections were developed using 2008-2010 survival rates that were increased by half the projected improvement in national life expectancy change in the future. Two alternative future year survival rate scenarios were tested: holding baseline 2008-2010 survival rates throughout the forecast horizon; applying 100 percent of the projected improvement in national life expectancy. The resulting impacts are presented in Figure 3-15.

FIGURE 3-15. NYC TOTAL POPULATION OUTPUT USING ALTERNATIVE SURVIVAL RATES



3.2.4 Group Quarters Population

When considering those who live in a dormitory, nursing home, correctional facility or other places where the population is supervised and not living in housing units — defined as “group quarters” — their

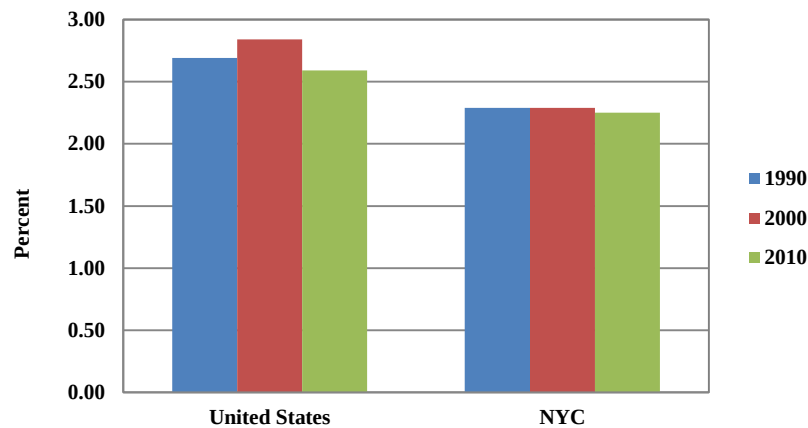
mortality, fertility, and migration patterns are different from those living in households. Therefore, the group quarters population was initially removed from the general population and then placed back in after the projection was completed. This method allows for those in group quarters to be included in the projection, but not to have the same fertility, mortality, and migration experiences as the household population.

The overall number in group quarters increased from 167,900 in 1990 to 183,700 in 2000, and reached 185,500 in 2010 (Table 3-16). As a percentage of the overall population, the group quarters population remained unchanged between 1990 and 2000 (2.29 percent), but declined to 2.25 percent in 2010 (Figure 3-16). The population in group quarters in this forecast was left at over 185,000 from the base year to the final projection year. If the group quarters population were added back based on the 2010 percentage of the household population, the 2050 projected population would have increased by 21,000 persons.

TABLE 3-16. GROUP QUARTERS POPULATION 1990-2010

	1990	2000	2010
New York City	167,873	183,682	185,530
Bronx	40,421	47,610	46,710
Brooklyn	34,263	39,822	35,609
Manhattan	58,563	60,158	67,373
Queens	27,223	26,895	28,000
Staten Island	7,403	9,197	7,838

FIGURE 3-16. GROUP QUARTERS AS A PERCENT OF TOTAL POPULATION (1990-2010)



3.2.5 Household Population

The household population is projected using the cohort component model described earlier. Since the group quarters population was held constant in our model, the household population follows the same growth pattern as the total population as it is calculated by simply subtracting the constant group quarters population from the total population in each interval of the forecasting horizon.

3.3 Population Projections – 26 County Region

As indicated in Section 1.1.2, a separate model was developed to forecast population projections for the 26-County Region outside New York City. The cohort-component method applied for this geography, employs a demographic-economic method. Similar to the pure demographic approach applied to the New York City region as discussed in Section 3.2, this approach tracks population changes due to components of natural increase (births and deaths) as well net migration. The primary difference between this approach and that used to generate the population projections of only New York City only, is that the migration component of change also accounts for impacts to migration flows due to labor induced net migration adjustments that are linked to projected employment demand.

The demographic-economic model allows migration patterns to fluctuate depending on the demand for labor in the local economy. This adds an element of dynamism to the model and also acts to ensure that the propensity for migration varies in a manner similar to historical estimates of residual migration over time rather than a fixed rate. Thus, in a demographic-economic model, as detailed herein, the total net migration serves as a nexus between population and employment.

It should be noted that the treatment of populations in group quarters is similar to that applied in the New York City Population Model in that they are withheld from the calculation and application of fertility and migration rates. However, one difference from the approach applied only to the New York City region is that the 26-County Region model provides the option for group quarters to be held at either constant level, or as a constant share (by sex and age cohort) – based on a review of both 2000 and 2010 census data that showed an essentially constant share of group quarters population at the three separate intervals (Table 3-17). Although difficult to predict the development and expansion of group quarter facilities, the data in Table 3-17 suggests that the demand for these facilities grows in some proportion to growth in population. By using the constant share approach, the 26-County model implicitly assumes that the housing demand for group quarter populations will either be met through more intensive use or expansion of existing facilities, and/or the development of new facilities. Nonetheless, the inclusion of the constant level option provides an opportunity to test the sensitivity of population projections to this assumption on the population projections.

TABLE 3-17. CHANGE IN GROUP QUARTER POPULATION (2000 –2010)

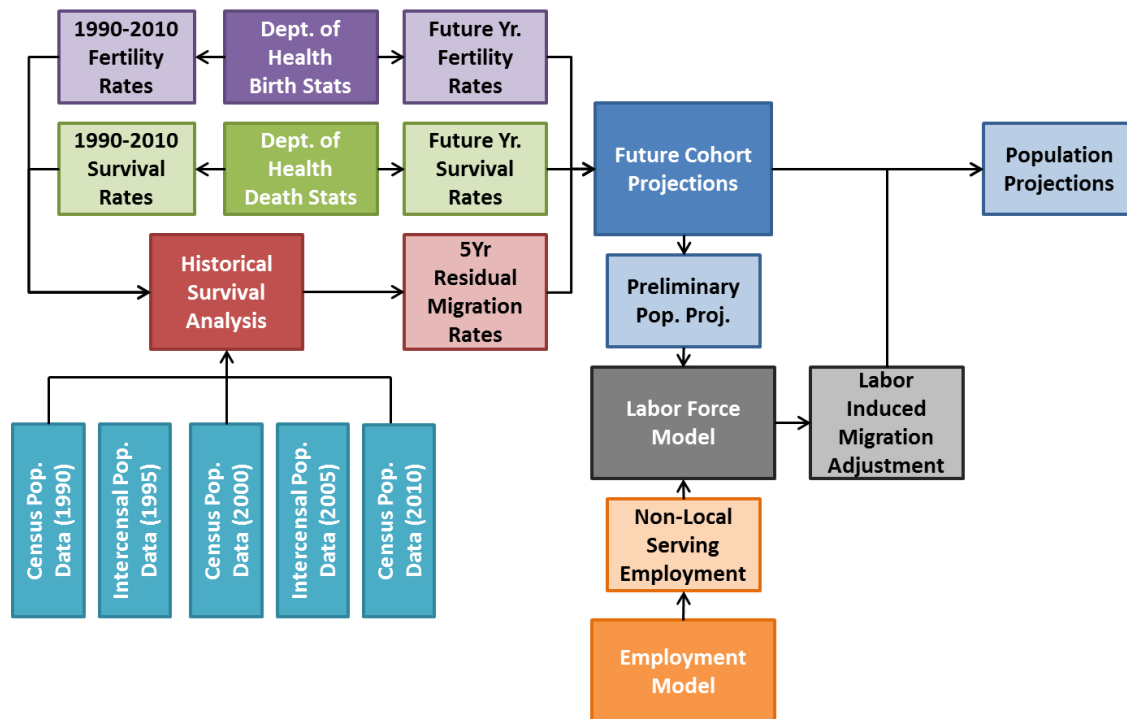
		New York City	Long Island	Mid-Hudson	New Jersey	Connecticut	TOTAL
Total Population	1990	7,567,347	2,609,212	2,025,972	6,079,453	1,805,956	20,087,940
GQ Population		167,873	50,002	84,932	127,402	43,932	474,141
GQ % Total Pop.		2.2%	1.9%	4.2%	2.1%	2.4%	2.4%
Total Population	2000	8,008,278	2,753,913	2,179,189	6,661,750	1,888,768	21,491,898
GQ Population		182,430	50,236	81,440	142,405	48,161	504,672
GQ % Total Pop.		2.3%	1.8%	3.7%	2.1%	2.5%	2.3%
Total Population	2010	8,242,624	2,832,882	2,290,851	6,946,420	1,969,233	22,282,010
GQ Population		185,530	51,072	86,272	139,983	51,170	514,027
GQ % Total Pop.		2.3%	1.8%	3.8%	2.0%	2.6%	2.3%

Source: US Census

Figure 3-17 represents a summary overview of the structure of this cohort component model that shows the links to both the Employment and Labor Force models. The rest of this section provides a brief

description of individual components of the workflow as well as the corresponding inputs into the model. Although the cohort component model uses individual county level inputs, the discussion of input assumptions and associated trends in this technical memorandum is focused largely on the subregional geography for practical reasons.

FIGURE 3-17. 26-COUNTY REGION POPULATION PROJECTION METHODOLOGY



3.3.1 Fertility Rates

The fertility rates applied to the 26-County Region model were estimated using birth data compiled from the three State Departments of Health in New York, New Jersey, and Connecticut, while population data was obtained from the decennial census (1990, 2000, and 2010) as well as intercensal estimates spanning the three decennial census counts. As indicated in the introduction to Section 3.1.1, fertility rates were calculated based only on the female population in households.

Despite the uncertainty of long-term future rates of fertility briefly described in Section 3.1.1, the 26-County Model sought to apply future fertility rates that reflected some of portion of the recent trends observed in fertility rates as presented in Figure 3-1.

Projections generated using 'best fit' linear equations obtained from the annual series of historic fertility rates between 1990 and 2010 were evaluated as a possible means of determining future ASFRs to be applied in the population model. However this approach had the potential to result in significant changes in fertility rates by the 2050 horizon of the forecasting period as demonstrated by the faint dotted lines in Figure 3-18. The magnitudes of some of these ASFR changes were deemed too drastic especially given the uncertainty associated with long term projections over 40 years – in the case of females aged 15-19, this linear projection generated negative fertility rates over the last two decades of the forecast horizon.

To moderate the resulting change in projected ASFRs, best fit logarithmic equations were fitted through the annual series of historical ASFRs.³³ Projections using these logarithmic equations generated future ASFR estimates that still maintained some of the directional drift observed in recent trends. The logarithmic based projections of ASFRs provided a compromise that struck a reasonable balance between the continuation of recent trends, and long term uncertainty of future levels as depicted in Figure 3-19. Logarithmically projected ASFRs were applied to the 26 counties (see Appendix A for details) with the exception of Rockland (NY), Orange (NY) and Ocean (NJ). Unlike the rest of the counties in the 26-County Region, these three counties ran counter to the trend of declining fertility rates for women under the age of 30, and also displayed significant increases in ASFRs among women 30 years and above. The Project Team in consultation with Forecast Working Group (FWG) elected to hold the ASFRs from these three counties constant at 2010 rates in recognition of already high ASFRs that might exceed plausible levels even through use of the moderated ASFR logarithmic projection approach.

FIGURE 3-18. 31-COUNTY REGION HISTORIC AND PROJECTED ASFRs

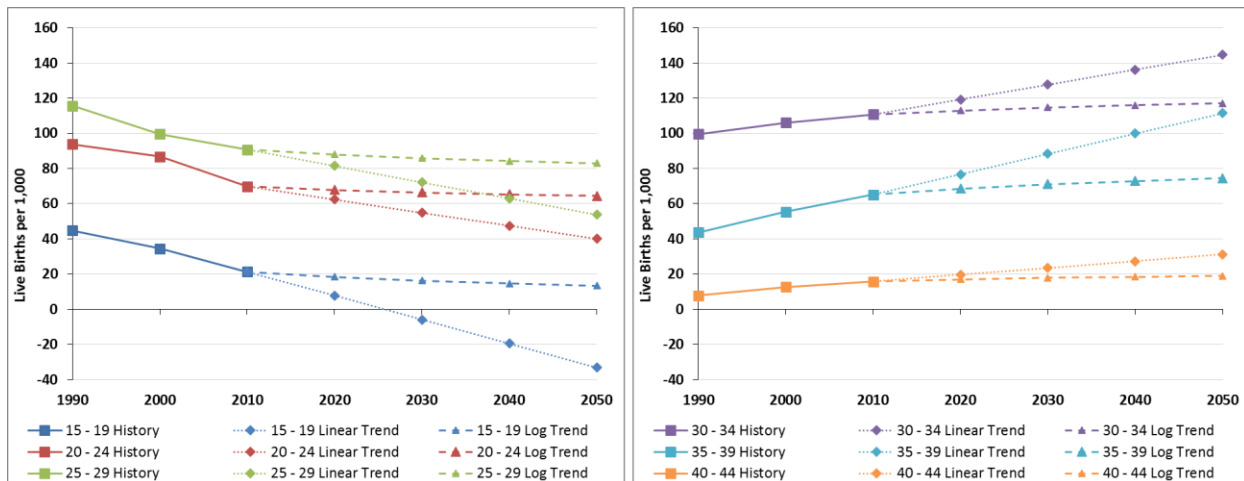
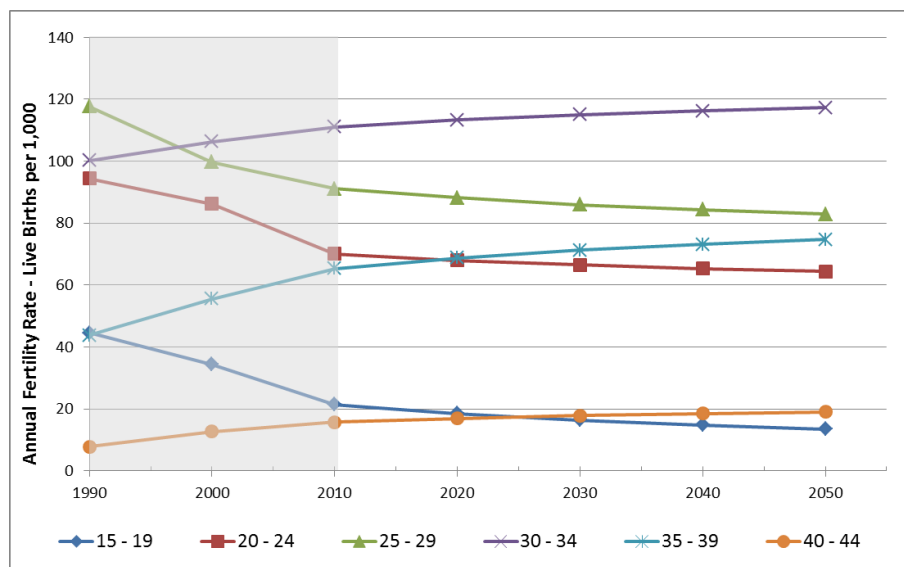


FIGURE 3-19. 31-COUNTY REGION HISTORIC AND LOGARITHMICALLY PROJECTED ASFRs



Similar to the sensitivity tests conducted for the NYC region, alternative ASFRs were also applied in the model. Tests were conducted using both the logarithmically-projected ASFRs, as well as holding rates constant at the 2010 levels. Due to the offsetting directionality of the ASFRs above and below the 30 year threshold, these sensitivity tests resulted in minimal changes to overall forecasts (see Technical Memorandum 4 for more details).

3.3.2 Survival Rates

Data on deaths were obtained from the New York, New Jersey and Connecticut State Departments of Health, while population data by age and gender was obtained from the decennial census. ASDRs were estimated for 1990, 2000, and 2010 and subsequently used as the basis for life tables that calculated age specific survival rates.

Table 3-18 provides an example of the life table construction for the 31-County Region (both male and female) based on the procedures briefly described in Section 3.1.2, and the subsequent calculation corresponding age-specific survival rates. The conversion of ASDRs (nM_x in the table) to corresponding probabilities of dying (nq_x in the table) is performed using Equation 3-4 as previously described for all age groups with the exception of the first group where the probability of dying was calculated simply as the infant mortality rate (nD_x divided by the number of live births).

TABLE 3-18. 2010 LIFE TABLE & SURVIVAL RATE CALCULATION EXAMPLE (MALE & FEMALE, 31 COUNTIES)

x to x+n	x	n	nP_x	nD_x	nM_x	nq_x	l_x	nd_x	nL_x	T_x	e_x		LIVE BIRTHS	5Yr Survival Rates
0 to 1	0	1	271,308	1,293	0.004766	0.004556	100,000	456	99,772	8,140,528	81.41		283,798	Births 0.995644
1 to 4	1	4	1,095,236	176	0.000161	0.000643	99,544	64	398,050	8,040,756	80.78			0 - 4 0.998968
5 to 9	5	5	1,384,835	105	0.000076	0.000379	99,480	38	497,308	7,642,707	76.83			5 - 9 0.999537
10 to 14	10	5	1,432,244	157	0.000110	0.000548	99,443	54	497,077	7,145,399	71.85			10 - 14 0.998841
15 to 19	15	5	1,514,842	537	0.000354	0.001771	99,388	176	496,501	6,648,321	66.89			15 - 19 0.997439
20 to 24	20	5	1,502,692	1,009	0.000671	0.003352	99,212	333	495,230	6,151,820	62.01			20 - 24 0.996672
25 to 29	25	5	1,572,778	1,041	0.000662	0.003304	98,880	327	493,582	5,656,590	57.21			25 - 29 0.996522
30 to 34	30	5	1,513,920	1,108	0.000732	0.003653	98,553	360	491,865	5,163,009	52.39			30 - 34 0.995800
35 to 39	35	5	1,506,968	1,435	0.000952	0.004750	98,193	466	489,799	4,671,144	47.57			35 - 39 0.993764
40 to 44	40	5	1,619,296	2,513	0.001552	0.007730	97,727	755	486,745	4,181,344	42.79			40 - 44 0.989857
45 to 49	45	5	1,712,064	4,333	0.002531	0.012575	96,971	1,219	481,808	3,694,600	38.10			45 - 49 0.984311
50 to 54	50	5	1,634,158	6,217	0.003804	0.018843	95,752	1,804	474,249	3,212,792	33.55			50 - 54 0.976374
55 to 59	55	5	1,393,321	8,057	0.005783	0.028501	93,948	2,678	463,044	2,738,544	29.15			55 - 59 0.965017
60 to 64	60	5	1,195,321	10,170	0.008508	0.041655	91,270	3,802	446,845	2,275,499	24.93			60 - 64 0.948674
65 to 69	65	5	867,448	10,993	0.012673	0.061418	87,468	5,372	423,911	1,828,654	20.91			65 - 69 0.922935
70 to 74	70	5	655,347	12,890	0.019669	0.093736	82,096	7,695	391,242	1,404,743	17.11			70 - 74 0.880881
75 to 79	75	5	530,251	16,842	0.031762	0.147129	74,401	10,946	344,637	1,013,502	13.62			75 - 79 0.814299
80 to 84	80	5	438,311	22,886	0.052214	0.230926	63,454	14,653	280,638	668,864	10.54			80 - 84 0.718458
85+	85	5	441,670	55,519	0.125702	1.000000	48,801	48,801	388,226	388,226	7.96			85 + 0.442394

Due to limitations in obtaining mortality statistics of persons over 85 years of age, with sufficient age and sex detail from all three State Departments of Health, survival rate estimates for the second oldest age group could not be calculated using Equation 3-6. Unlike the survival rate estimates calculated in the NYC models using more granular mortality data above age 85, applying Equation 3-6 to the values in Table 3-18 in order to obtain 5-year survival rates of persons between 80 and 84 (${}_5S_{80}$) resulted in illogical estimates for several counties in the 26-County model.

Rather than calculate survival rates using T_x values ($T_{85+}/{}_5T_{80}$ in this case) as discussed in Section 3.1.2, and apply the resulting estimates to both the final age groups (thereby treating 80-84 as the open ended terminal age group), the Project Team set the 85+ age group 5-year survival rate equal to $T_{85+}/{}_5T_{80}$ as described, and estimating ${}_5S_{80}$ through curve fitting interpolation. The final estimate of 5-year survival rates of persons 85 and above was then calculated so as to ensure that straight average of the last two age groups (using the interpolated ${}_5S_{80}$) equaled $T_{85+}/{}_5T_{80}$.

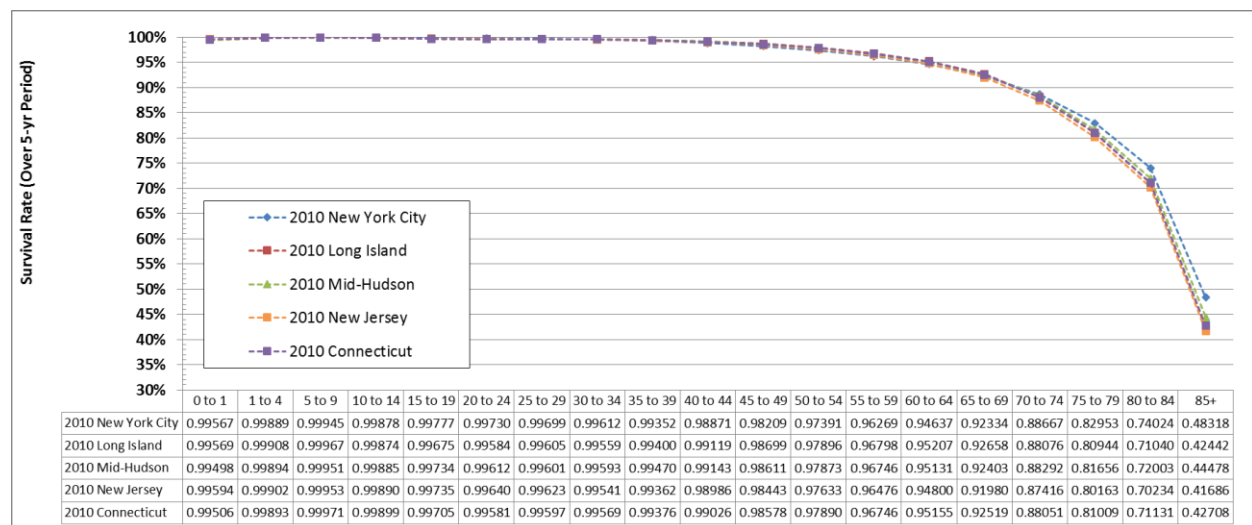
As an analytical exercise, the alternative survival rate approach described above was tested in a sensitivity analysis, and resulted in negligible changes as further discussed in in Technical Memorandum 4.

Figure 3-20 represents the curves generated for each of the five subregions in 2010 and these initial survival rate traces also follow the traditional pattern of high survival probability for younger age cohorts with an accelerating decay in the latter cohorts. Each of the five subregions display very similar survival rates with little distinction between the subregions at virtually all of the age cohorts.

New York City is the exception as the survival rates of its older population (65 and above) begin to separate above the rest of the subregions – keeping in line with recent trends of vastly improved life expectancy relative to the rest of the region (*Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum).

A review of the survival rates calculated for 1990, 2000 and 2010 show an increased likelihood of survival for each age cohort over that time period. Further survival rate improvements are anticipated during the forecasting horizon due to continued advancements in the factors driving positive historical changes (advances in medical science, motor vehicle safety, etc.)³⁴.

FIGURE 3-20. 31-COUNTY REGION SURVIVAL RATES BY AGE AND SUBREGION (2010)



Source: New York, New Jersey & Connecticut State Departments of Health, & US Census

Similar to the approach adopted in the New York City Population Model, adjustments to the 2010 pivoted off the projected age-specific changes anticipated by the United States Social Security Administration (SSA) Life Tables between 2010 and 2050. Since SSA life tables are on annual basis, survival rate estimates for 2010 and 2050 were calculated by summing the annual years lived within each age group interval and applying the summed values into Equation 3-6. The resulting survival ratio estimates are presented in Table 3-19.

The resulting changes in estimated survival rates between 2010 and 2050 are provided in the table. However, to ensure that the application of SSA growth rates did not result in illogical values (survival rates greater than one) when applied to each of the 26 remaining counties, the 'percent closed' was also calculated from the SSA data.

The 'percent closed' metric is intended to reflect the reduction in difference between perfect survival odds, and the corresponding actual survival rate for age group. For instance, the 5-year survival rate for 75-79 year old males improves from 0.706748 in 2010 to 0.790670 in 2050. Therefore the difference between perfect survival in 2010 (one minus 0.706748) narrows from 0.293 to 0.219; a 25 percent reduction. The age/sex-specific 'percent closed' improvements between 2010 and 2050 were then applied to the survival rates each individual county with the appropriate interpolation of for each time interval within the forty year forecast horizon – 2013 was used as interpolation mid-point for the 2010-2015 interval, 2018 as the midpoint for the 2015-2020, and so on.

TABLE 3-19. SSA SURVIVAL RATE ESTIMATES 2010-2050

Age	Male				Female			
	2010	2050	% Change	% Closed	2010	2050	% Change	% Closed
Births	0.993774	0.996896	0.3%	50.1%	0.994756	0.997384	0.3%	50.1%
0 to 4	0.998919	0.999394	0.0%	43.9%	0.999125	0.999519	0.0%	45.0%
5 to 9	0.999351	0.999649	0.0%	45.8%	0.999435	0.999693	0.0%	45.7%
10 to 14	0.997542	0.998299	0.1%	30.8%	0.998764	0.999151	0.0%	31.3%
15 to 19	0.994725	0.996210	0.1%	28.2%	0.998008	0.998538	0.1%	26.6%
20 to 24	0.994212	0.995881	0.2%	28.8%	0.997762	0.998361	0.1%	26.8%
25 to 29	0.994203	0.995929	0.2%	29.8%	0.997062	0.997842	0.1%	26.5%
30 to 34	0.992169	0.994499	0.2%	29.8%	0.995446	0.996632	0.1%	26.0%
35 to 39	0.988239	0.991775	0.4%	30.1%	0.992987	0.994822	0.2%	26.2%
40 to 44	0.982617	0.988016	0.5%	31.1%	0.990171	0.992781	0.3%	26.6%
45 to 49	0.976537	0.983945	0.8%	31.6%	0.986221	0.989969	0.4%	27.2%
50 to 54	0.966699	0.977069	1.1%	31.1%	0.978470	0.984331	0.6%	27.2%
55 to 59	0.948264	0.964055	1.7%	30.5%	0.964859	0.974472	1.0%	27.4%
60 to 64	0.918058	0.941015	2.5%	28.0%	0.943232	0.957694	1.5%	25.5%
65 to 69	0.872456	0.905927	3.8%	26.2%	0.910695	0.932285	2.4%	24.2%
70 to 74	0.807811	0.857186	6.1%	25.7%	0.862280	0.895906	3.9%	24.4%
75 to 79	0.706748	0.780670	10.5%	25.2%	0.782263	0.837993	7.1%	25.6%
80 to 84	0.554095	0.642153	15.9%	19.7%	0.653144	0.725660	11.1%	20.9%
85+	0.402265	0.467477	16.2%	10.9%	0.471889	0.528841	12.1%	10.8%

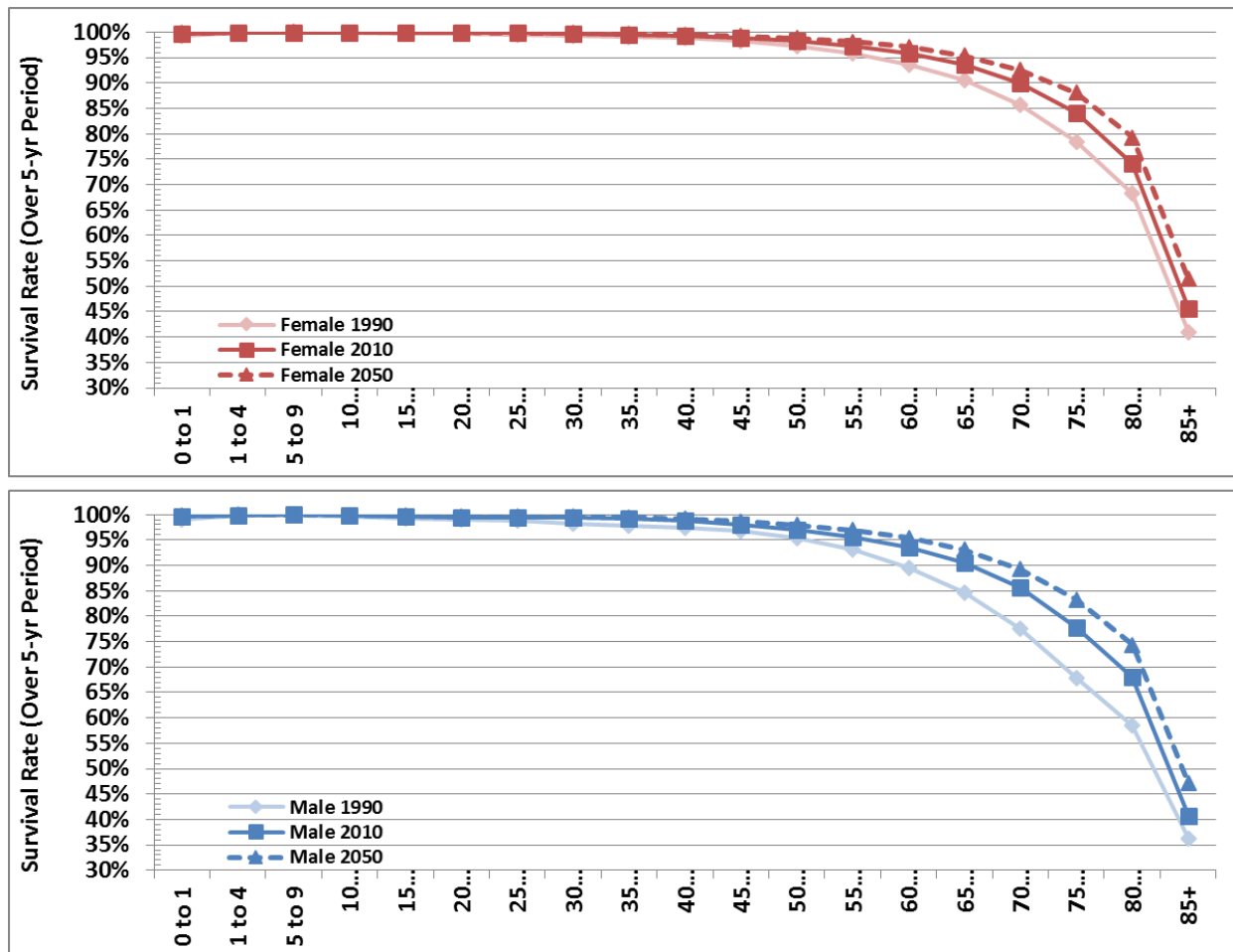
The projected change in survival rates for the 31-County Region using this approach are presented in Figure 3-21 that also includes the 31-County estimated 1990 survival rates for historical context. The 31-County 2010-2050 projections derived from the SSA projections appear plausible, especially in comparison to the estimated historical change observed between 1990 and 2010.

Based on this assessment, the 26-County population projections in each of the five year intervals comprising the forecast horizon, will be developed using the appropriate interpolation of the 2010 to 2050 projections. To test the sensitivity of the future survival rate assumptions, an adjustment factor ranging between 50-100% will be applied to the projected age specific change in survival in conformance with assumptions applied in New York City Population Model. This scenario flexibility will once again afford the opportunity to test the sensitivity of population projections to the future mortality rate assumptions.

Appendix B of this report documents the resulting age/sex-specific survival rates applied in the 26-County population forecast model. Alternative proportions of the national survival rate improvements

were applied in the model as part of a sensitivity test. This assessment is discussed in Technical Memorandum 4.

FIGURE 3-21. PROJECTED 31-COUNTY REGION SURVIVAL RATES BY AGE AND SEX (2010–2050)



Source: New York, New Jersey & Connecticut State Departments of Health, & Social Security Administration (LBG 2015)

3.3.3 Migration Rates

The net migration component of the cohort component model is comprised of two inter-related elements as broadly represented below:

$$\text{Total Net Migration} = \text{Historical Residual Migration} + \text{Labor Induced Migration Adjustment (LIMA)}$$

The net migration estimates in the 26-County model are initially calculated in a similar manner to that described for the New York City model, and represent residuals from a forward survival analysis conducted in five year intervals between 1990 and 2010.

In the 31-County Region and other areas with a strong and varied employment base, a primary determinant of net migration is labor force demand. Extending upon the pure demographic model, which relies on historical residual migration rates, the demographic-economic model allows migration patterns to fluctuate depending on the demand for labor in the local economy. Labor induced

migration reflects the residual required to balance labor demand (available jobs) and labor supply (labor force) after accounting for net commutation and unemployment. This section of the technical memorandum focuses primarily on the historical residual component of migration while the Section 4.0, discussing labor force, will detail the steps taken to calculate the economic migrant adjustment.

Although represented as two distinct components in the above expression, total net migration should be conceptually viewed as a single fluid phenomenon with complementary interactions between both components. The decomposition of migration into these two components is primarily designed to simplify the discussion of the net migration computation, in light of the interaction between population and employment. The historical residual rates of migration, include economic migrants but can only represent the relationship between population and employment in a historic sense. The balancing of future labor supply and demand in this process is intended to align population growth in some correspondence with future employment growth that may proceed in a manner distinct from historical experience for a variety of reasons (different economic conditions, altered demographic composition and profiles, changing labor force participation and industrial mix, etc).

3.3.3.1 Historical Residual Migration Rate Estimates

The historical net migration component is calculated by applying mortality rates and “surviving” an enumerated population, yielding an “expected” population for each age/sex group five years later. The difference between expected and survived populations at each age group represents the estimated volume of net migrants and is expressed as an age/sex-specific ratio of the initial enumerating population.

As indicated in the Summaries and Analysis of Existing Trends and Key Factors for Forecasting Technical Memorandum, there is a great degree of uncertainty in the age-specific rates of migration from one decennial period to the next. Given the importance of migration in the cohort component forecasting process, the Project Team sought to hedge against the period-to-period uncertainty by using a longer historical period of analysis of 1990-2010 to derive patterns of net migration.³⁵ Four separate net migration profiles were developed for each of the five year intervals contained in that range.³⁶ Similar to the approach taken in the NYC models, an average five-year net migration rate was calculated for each decade, and the resulting two rates were used to derive a five-year net migration rate reflecting average experience observed over the entire 20 year period.

The seven age-specific net migration estimates (left portion of Figure 3-22) were used to create a small distribution of historical migration rates that could be sampled from and applied in the model to generate future year population projections. The right portion of Figure 3-22 provides an example of the resulting envelope of potential outcomes bracketed by the maximum and minimum values – as well as intermediate interquartile markers at the 25th, 50th (median), and 75th percentiles of the small sampling distribution.

Figure 3-23 presents the median age-specific migration rates for all five subregions (both male and female combined) – similar charts of median net migration rates for the individual counties can be located in Appendix C of this technical memorandum, and provide an indication of the variations in net migration rate profiles across individual counties.

As expected, NYC (relative to the other four subregions) experienced noticeably higher net out-migration in the younger age cohorts as well as the prime and middle labor force cohorts (30-49) that are both likely due to the suburban relocation associated with families raising children. The city conversely experienced noticeably high net in-migration in the young adult cohorts (20-29) that generally coincides with net out-migration in the surrounding subregions – particularly within the 20-24

cohort. The region generally experiences net out-migration for ages older than 50 with even greater outflow among retirees and seniors.

FIGURE 3-22. AGE-SPECIFIC MIGRATION RATE PROFILE ENVELOPE EXAMPLE (NEW JERSEY SUBREGION)

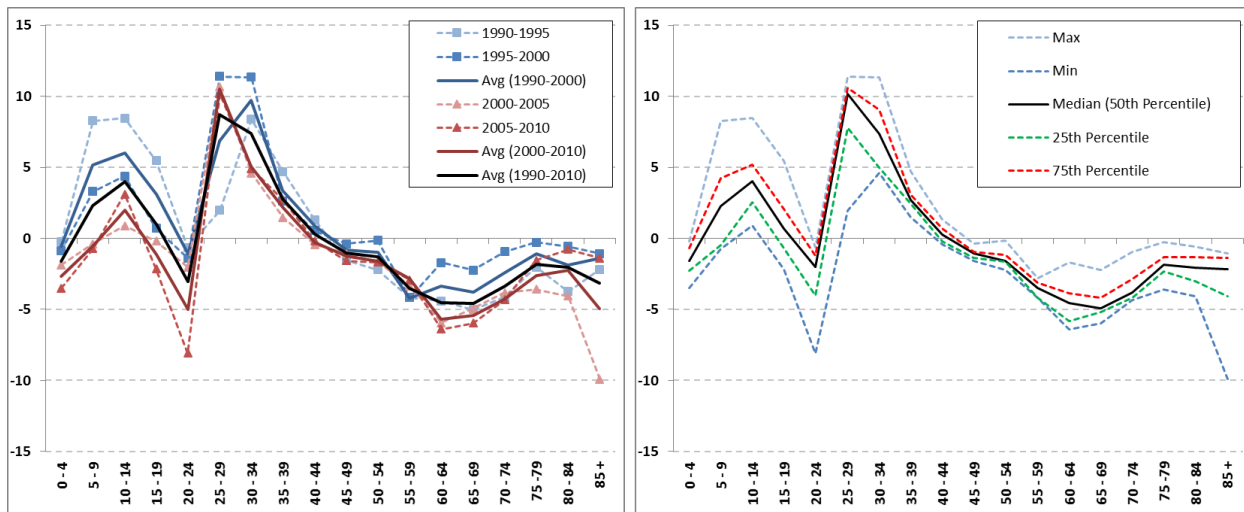
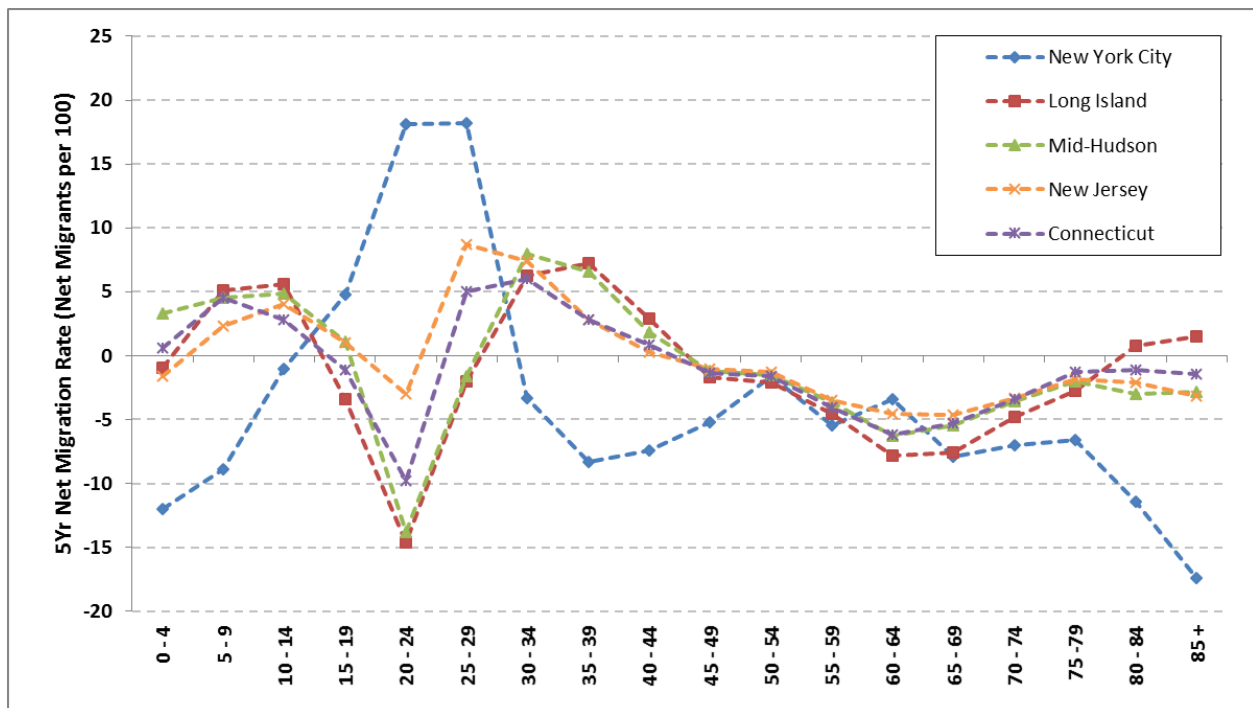


FIGURE 3-23. MEDIAN 5-YR AGE-SPECIFIC MIGRATION BY SUBREGION (1990-2010)



Source: US Census Bureau, New York, New Jersey & Connecticut State Departments of Health, LBG 2014

3.3.3.2 Historical Residual Migration Rate Adjustments

The preliminary population projections of each county carried into the Labor Force Model as indicated in Figure 3-17, comprised the natural increase components of births and deaths, as well as a net

migration estimate, that is set initially at the median (50th percentile) rate as shown in the right portion of the Figure 3-22 example. The resulting population forecasts derived from the combination of the initial historical residual rate, plus labor induced migration adjustments, were further adjusted (if required) to address feedback received from the FWG with respect to land use constraints and/or other relevant considerations of future growth trajectories.

Given that the labor induced migration adjustment is automatically calculated as the difference between labor supply and demand (Section 4.3), modifying the percentile value of the residual migration rate becomes the primary lever used to adjust overall net migration. Table 3-20 provides both historical and projected crude migration rates under two scenarios – the first scenario (Historic Residual Median) represents the forecasted CMRs if median historic residual rates of migration are the only input into the model, while the second scenario (Modified Historical & LIMA) represents the resulting CMRs from the population model once labor induced migration adjustments have also been accounted for.

TABLE 3-20. HISTORICAL AND PROJECTED CRUDE MIGRATION RATE

Geography	HISTORIC								FORECAST CMR				FORECAST CMR			
	Crude Migration Rates (CMR) - Rate per 100								Historic Residual Median				Modified Historical & LIMA			
	'50-'60	'60-'70	'70-'80	'80-'90	'90-'00	'00-'10	Max	Min	10-'20	20-'30	30-'40	40-'50	10-'20	20-'30	30-'40	40-'50
Nassau County	68.8	1.5	-10.7	-4.8	-0.9	-3.0	68.8	-10.7	-3.8	-4.4	-4.0	-4.1	-2.0	1.3	3.9	2.8
Suffolk County	116.6	50.5	4.7	-2.6	0.3	-0.2	116.6	-2.6	-2.1	-2.2	-1.8	-2.2	-2.5	1.8	3.1	3.1
Long Island	82.7	18.1	-3.9	-3.7	-0.3	-1.6	82.7	-3.9	-2.9	-3.2	-2.8	-3.1	-2.3	1.6	3.5	2.9
Dutchess County	17.1	14.6	3.7	1.8	2.0	3.0	17.1	1.8	1.0	0.6	0.9	0.3	0.1	3.1	4.6	4.5
Orange County	9.9	10.9	9.4	11.4	2.0	1.3	11.4	1.3	0.3	0.3	0.5	0.0	-0.1	4.2	5.6	4.8
Putnam County	43.8	65.0	26.9	2.3	5.7	-1.0	65.0	-1.0	-1.8	-1.9	-0.8	-1.9	-1.9	1.1	3.7	3.2
Rockland County	38.6	52.1	4.6	-3.9	-0.5	-0.5	52.1	-3.9	-2.2	-2.3	-2.0	-1.8	-3.2	-1.0	0.1	-0.7
Sullivan County	4.5	12.5	20.8	5.0	3.1	2.6	20.8	2.6	3.7	3.7	2.1	1.2	-0.9	4.7	6.7	6.2
Ulster County	18.8	10.5	7.7	1.4	3.6	1.3	18.8	1.3	1.7	1.3	0.8	0.1	1.7	3.5	4.3	4.1
Westchester County	17.3	2.4	-6.8	-1.7	-0.9	-2.4	17.3	-6.8	-3.1	-3.4	-3.2	-3.4	-1.9	-0.1	1.8	1.8
Mid-Hudson	18.1	11.7	0.9	0.9	0.7	-0.4	18.1	-0.4	-1.2	-1.4	-1.3	-1.6	-1.2	1.4	3.0	2.7
Bergen County	28.3	6.4	-8.8	-3.6	3.8	-0.7	28.3	-8.8	-0.6	-0.9	-0.7	-0.8	0.3	-0.1	0.6	1.3
Essex County	-8.3	-7.6	-15.3	-12.5	-7.1	-7.7	-7.1	-15.3	-6.8	-7.1	-7.5	-7.7	-3.6	-1.0	0.2	0.8
Hudson County	-15.2	-7.8	-13.4	-4.2	0.6	-3.7	0.6	-15.2	-1.0	-2.5	-2.3	-2.1	-2.9	-1.6	0.7	0.2
Hunterdon County	16.8	20.2	18.7	17.1	5.3	1.0	20.2	1.0	-2.0	-2.9	0.0	-0.2	-0.3	1.3	5.0	5.2
Mercer County	3.3	4.4	-5.1	1.6	1.7	-0.3	4.4	-5.1	0.6	0.2	0.1	0.0	-0.7	3.3	4.8	4.2
Middlesex County	42.3	19.8	-5.0	7.3	4.7	1.4	42.3	-5.0	2.2	2.1	1.8	1.6	-1.5	-0.7	1.4	0.9
Monmouth County	32.5	26.3	3.1	6.1	6.0	-1.2	32.5	-1.2	-0.6	-0.6	0.3	-0.2	-1.4	-0.4	2.4	3.2
Morris County	41.7	32.0	-1.3	-2.0	4.9	-0.4	41.7	-2.0	-1.2	-1.4	0.2	0.1	0.9	-0.4	-0.4	0.8
Ocean County	74.4	79.4	61.4	24.7	18.6	11.7	79.4	11.7	14.5	16.2	15.3	13.6	2.0	5.9	8.2	5.1
Passaic County	8.1	3.1	-10.0	-4.3	-1.2	-5.4	8.1	-10.0	-3.8	-4.1	-4.4	-4.5	-4.7	-1.8	0.1	0.9
Somerset County	27.6	23.8	-3.3	12.5	14.6	1.7	27.6	-3.3	3.8	3.4	4.7	4.8	-1.3	-1.7	0.8	2.6
Sussex County	29.1	43.6	38.1	4.1	1.9	-1.0	43.6	-1.0	-2.6	-1.3	-0.2	-1.1	-0.4	0.5	5.7	6.5
Union County	12.4	-0.8	-11.0	-4.3	-0.2	-3.3	12.4	-11.0	-2.6	-2.9	-2.9	-2.9	-2.3	-1.2	0.2	-0.3
Warren County	6.2	9.8	9.0	3.8	6.5	2.4	9.8	2.4	2.3	2.6	3.4	2.5	1.0	2.2	4.6	4.7
New Jersey	10.2	7.5	-4.7	0.1	3.2	-1.0	10.2	-4.7	0.1	0.1	0.6	0.5	-1.3	0.0	1.8	1.8
Fairfield County	16.0	10.9	-3.5	-1.8	-0.6	-1.6	16.0	-3.5	-2.9	-3.2	-2.7	-2.9	-1.4	-0.4	1.5	1.5
Litchfield County	9.0	11.9	4.9	7.4	0.5	3.2	11.9	0.5	-0.5	-0.4	-0.5	-1.7	0.8	3.1	5.7	6.2
New Haven County	7.7	2.9	-3.2	1.5	-2.4	1.8	7.7	-3.2	-0.6	-0.8	-1.1	-1.4	1.4	3.7	4.5	4.4
Connecticut	11.5	7.3	-2.6	0.5	-1.3	0.4	11.5	-2.6	-1.6	-1.9	-1.8	-0.7	0.0	1.7	3.2	1.2

3.3.4 26-County Population Forecasts

The resulting population forecast model outputs that combine the cohort component forecasting process are presented in Table 3 14. A more detailed discussion of forecast results is provided in Technical Memorandum 4.

TABLE 3-21. 26-COUNTY POPULATION FORECASTS

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Nassau County	1,339,532	1,354,045	1,355,496	1,379,331	1,423,052	1,475,318	1,530,074	1,579,440	1,627,374
Suffolk County	1,493,350	1,502,193	1,513,038	1,542,300	1,587,892	1,630,332	1,665,742	1,697,546	1,731,185
Long Island	2,832,882	2,856,238	2,868,534	2,921,630	3,010,943	3,105,649	3,195,816	3,276,986	3,358,559
Dutchess County	297,488	301,608	304,729	311,567	320,840	329,766	337,270	344,278	351,790
Orange County	372,813	386,024	398,517	417,984	442,618	468,220	493,501	518,292	545,140
Putnam County	99,710	100,083	100,499	101,627	103,703	106,224	108,281	109,924	111,425
Rockland County	311,687	323,613	327,825	337,484	351,090	365,329	380,097	393,948	409,244
Sullivan County	77,547	77,833	78,031	78,746	81,811	84,491	86,639	88,890	91,596
Ulster County	182,493	185,097	187,082	189,776	192,973	195,349	196,231	196,882	197,651
Westchester County	949,113	973,036	978,138	998,319	1,031,391	1,071,863	1,109,678	1,148,288	1,190,128
Mid-Hudson	2,290,851	2,347,294	2,374,821	2,435,504	2,524,425	2,621,242	2,711,696	2,800,502	2,896,974
Bergen County	905,116	928,736	936,513	951,196	970,411	994,340	1,011,159	1,030,502	1,053,154
Essex County	783,969	790,286	801,211	818,044	838,992	861,438	885,615	909,020	938,104
Hudson County	634,266	664,766	678,229	696,939	725,532	755,258	784,871	815,684	845,787
Hunterdon County	127,351	127,964	128,043	128,443	129,636	132,065	133,892	135,431	136,100
Mercer County	367,511	372,496	381,601	395,407	412,144	431,061	448,857	466,275	484,790
Middlesex County	809,858	829,266	845,251	862,805	886,904	914,559	942,881	965,760	993,675
Monmouth County	630,380	631,442	635,267	639,231	645,133	655,030	662,606	671,946	678,320
Morris County	492,276	500,519	510,334	515,015	520,708	524,756	527,355	530,198	531,824
Ocean County	576,567	585,735	603,675	629,601	656,592	699,435	727,411	755,963	785,549
Passaic County	501,226	505,892	515,359	528,416	545,994	561,209	584,980	607,568	630,541
Somerset County	323,444	331,195	334,507	339,637	344,461	352,125	359,896	367,010	376,033
Sussex County	149,265	149,798	151,005	151,373	152,028	154,194	156,225	157,703	158,637
Union County	536,499	549,162	557,963	572,196	590,331	611,245	633,168	653,837	675,650
Warren County	108,692	109,881	110,760	112,152	113,764	115,164	117,200	118,165	118,669
New Jersey	6,946,420	7,077,137	7,189,718	7,340,455	7,532,631	7,761,878	7,976,116	8,185,060	8,406,830
Fairfield County	916,829	940,639	948,901	966,693	995,809	1,028,231	1,060,727	1,091,982	1,123,422
Litchfield County	189,927	190,278	191,032	192,561	194,590	197,156	197,942	198,830	199,140
New Haven County	862,477	878,509	897,926	924,063	956,479	986,046	1,011,647	1,035,282	1,059,804
Connecticut	1,969,233	2,009,426	2,037,859	2,083,317	2,146,877	2,211,434	2,270,317	2,326,094	2,382,367

3.4 Other Population Model Outputs

The Population Models will also generate estimates of school and university enrollment that pivot off the primary outputs of total population, population in households and population in group quarters discussed above. In addition, the primary model outputs will also be disaggregated by their estimated race and ethnicity components. Both of these processes are briefly described below.

3.4.1 School and University Enrollment

3.4.1.1 School and University Enrollment (New York City)

3.4.1.1.1 K-12 Enrollment

The New York State Education Department (NYSED) releases administrative data for public, charter, and private school enrollment by school location for grades K-12 annually. The school enrollment projections were done using a bottom-up approach, working from a base of 2013-2014 enrollment year data. Reported enrollments by school were aggregated for each of the boroughs for the base year and then projected forward using changes in the population of selected age/sex groups from DCP population projections. School enrollment by grade and gender from NYSED was linked to five-year age groups, using the following age-grade equivalency:

- Grades K-4: Ages 5-9
- Grades 5-8: Ages 10-14
- Grades 9-12: Ages 15-19

3.4.1.1.2 University Enrollment

University enrollment by school location is also available from NYSED for 2013-2014. Data on university enrollment were also available from the Department of City Planning Facilities Database. Since the population eligible for university enrollment goes well beyond the boundaries of the city, national trends were used to project NYC's university enrollment.

The National Center for Education Statistics releases projected national university enrollment to 2021 and the U.S. Census Bureau releases projections by age to 2060. For future university enrollment, the national population projections for persons 15 years and over were used to project national enrollment out to 2050. National university enrollment data were used to establish the ratio of New York City enrollment relative to that for the nation for the 2013-2014 base year. This ratio was then applied to the projected enrollment for the nation to derive local enrollment. The base year county distribution is applied to NYC's total university enrollment at each time point to derive the projected enrollment by county.

3.4.1.2 School and University Enrollment (26-County Region)

A similar process as that described above will also be applied to the 31-County Region. School administrative data from the New York, New Jersey and Connecticut State Departments of Education will be used to estimate current school enrollment statistics by location at the county level by each of the following grades and levels.

- Under 5 years: Pre-K
- Kindergarten
- Lower Elementary (Grades 1-4)
- Middle School or Upper Elementary (Grades 5-8)
- High School
- University (Undergraduate)
- University (Graduate)

The enrollment statistics will be used to calibrate 2010 Public Use Micro Sample (PUMS) data cross-tabulations of population age and enrollment status. This calibration will then allow the Enrollment Model to predict future estimates of school enrollment in response to changing population age and sex profiles.

3.4.2 Race & Ethnicity

County level projections will be developed for five mutually exclusive race/Hispanic groups:

- White Non-Hispanics
- Black Non-Hispanics
- Asian Non-Hispanics
- Other Non-Hispanics
- Hispanics

As discussed in the introduction to this Section of the technical memorandum, population projections by race and ethnicity will not be developed using a separate cohort component model for each group as was done in prior NYMTC 2040 socioeconomic and demographic forecasts.

Through consensus among the Project Team and FWG, it has been determined that the limitations associated with such an approach are too numerous to outweigh any potential benefits. The methodology, therefore, employs a race-specific overlay on the county level projections, using a proportional allocation method. The share of the population associated with each of the five race/Hispanic categories will be applied to the projected population for each of the forecast year intervals.

In order to make the determination of what those future shares should be, three separate sources of data were analyzed and compared:

- Independent Project Team trend projections using U.S. Census decennial counts and intercensal estimate data from 2000 through 2010.
- NYMTC's 2040 SED forecast
- National projections prepared by the U.S. Census Bureau

The Project Team created two straight-line trend projections using the U.S. Census data: the first trended the 2000-2010 historical shares for the 31-County Region out to 2050; the second trended out the nominal historical population levels to 2050 and then subsequently evaluated the implied share of those values.

NYMTC's 2040 forecast includes four mutually exclusive categories – Asian and Other Non-Hispanic are combined into a single category. For the current effort, the changing dynamic of Other Non-Hispanic warrants its own grouping. The national projections were principally used to provide context for the 31-County Region, helping determine their plausibility.

Table 3-22 presents race and ethnicity shares obtained from: the Project Team's two trend projections; NYMTC's 2040 projections; and the national projections. NYMTC's 2040 projections in the table only extend to 2035 because the New York City component of the subregional projections provided for review was truncated in 2035. Nonetheless, the data provided still facilitates a useful basis for benchmarking.

TABLE 3-22. 2015-2050 ESTIMATED RACE & ETHNICITY SHARES (31-COUNTY REGION)

PROJECT TEAM											
SHARES TREND	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
White Non-Hispanics	58%	55%	52%	50%	47%	44%	42%	39%	36%	34%	31%
Black Non-Hispanics	16%	16%	15%	15%	14%	14%	14%	13%	13%	12%	12%
Asian Non-Hispanics	7%	8%	9%	10%	12%	13%	14%	15%	16%	17%	18%
Hispanics	18%	20%	22%	23%	25%	27%	29%	30%	32%	34%	36%
Other Non-Hispanics	1%	1%	2%	2%	2%	2%	2%	2%	3%	3%	3%
PROJECT TEAM											
NOMINAL POP TREND	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
White Non-Hispanics	58%	55%	52%	50%	47%	45%	42%	40%	38%	36%	33%
Black Non-Hispanics	16%	16%	15%	15%	15%	14%	14%	13%	13%	12%	12%
Asian Non-Hispanics	7%	8%	9%	10%	11%	13%	14%	15%	16%	17%	17%
Hispanics	18%	20%	22%	23%	25%	27%	28%	30%	31%	33%	34%
Other Non-Hispanics	1%	1%	2%	2%	2%	2%	2%	2%	3%	3%	3%
NYMTC											
2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	
White Non-Hispanics	58%	55%	52%	49%	46%	43%	39%	36%			
Black Non-Hispanics	17%	16%	15%	14%	14%	13%	12%	11%			
Asian/Other Non-Hispanics	8%	9%	11%	13%	16%	18%	21%	24%			
Hispanics	18%	20%	22%	23%	25%	26%	28%	29%			
NATIONAL											
2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	
White Non-Hispanics	69%	67%	64%	62%	60%	58%	55%	53%	51%	49%	47%
Black Non-Hispanics	12%	12%	12%	12%	13%	13%	13%	13%	13%	13%	13%
Asian Non-Hispanics	4%	4%	5%	5%	5%	6%	6%	6%	7%	7%	7%
Hispanics	13%	15%	16%	18%	19%	20%	22%	23%	25%	26%	28%
Other Non-Hispanics	3%	2%	3%	3%	3%	3%	4%	4%	4%	5%	5%

Source: U.S. Census 2000, 2010; U.S. Census Intercensal Estimates; U.S. Census 2060 Population Projections; NYMTC 2040 SED Forecasts

For the 31-County Region as a whole, there is general consistency across the various measures. The Project Team's trend projections do not vary a great deal, as both project the White Non-Hispanic share of the population to drop from roughly half to a third; NYMTC also forecasts similar changes in shares for the comparable horizon (2035) although the projected drop in White Non-Hispanic is slightly higher, while the increase in Asian Non-Hispanic is conversely higher than the shares predicted by the two independent trend forecasts.

A closer evaluation of projected change by sub-region reveals a greater degree of variability and divergence in the various forecasting techniques, as would be expected for projections by race and ethnicity. At the subregional level, the implied shares derived from the trend projections of nominal population levels appear to comport fairly well with the trends observed in the National projections. Although there is greater divergence between NYMTC's projection of Asian Non-Hispanic shares and those implied by the trend projection at the subregional level, the remaining race and Hispanic origin categories appear largely compatible between the two methods as well within the context observed at the national level.

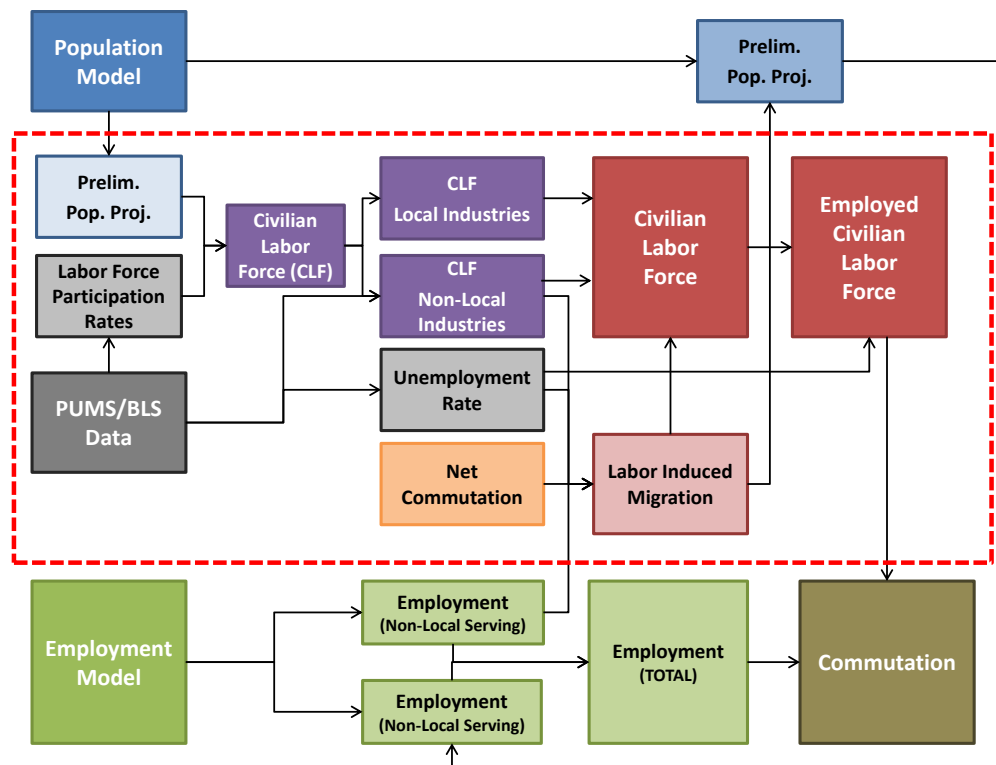
To ensure the capability to project race and ethnicity shares at the county level, the Project Team elects to estimate future shares of race and ethnicity, based on the shares implied from the extrapolation of nominal population by race and ethnicity. Although providing very similar results at the aggregate 31-County level in Table 3-22, the extrapolation of population levels is preferred to the direct extrapolation of shares because the latter approach sometimes results in illogical future trends (negative values) when race and ethnicity is further disaggregated by age and sex at the individual county level.

4.0 LABOR FORCE MODEL

This section of the technical memorandum addresses the labor force component of the 31-County Region and also addresses net migration component arising from the reconciliation between labor demand and supply.

The dotted red line in Figure 4-1 presents a conceptual overview of the Labor Force Model's structure and workflow – the figure also represents some of the interactions between the Labor Force Model and the other elements of the forecasting process. Aside from the civilian labor force projections generated by the Labor Force Model, other key functions of the Labor Force Model within the context of the overall SED projections are to: generate estimates of the Labor Induced Migration Adjustment (LIMA), and to provide an estimate of the employed labor force by county of residence to be reconciled with total employment projections by county of work through the commutation adjustments to historically observed commuter flows associated with the 31-County Region.

FIGURE 4-1. LABOR FORCE MODEL CONCEPTUAL OVERVIEW



The Labor Force Model converts population projection inputs into estimates of civilian labor force by combining various other inputs through a series of calculations that are described in the following sub-sections.

4.1 Civilian Labor Force

The Population Model generates county level forecasts of population distinguished by age and sex. These population volumes are converted into labor force estimates by applying age/sex-specific civilian labor force participation rates derived from PUMS and BLS. The general mathematical expression of the labor force participation rate is presented in Equation 4-1.

Equation 4-1

$$LFPR = \frac{CLF}{POP}$$

Where:

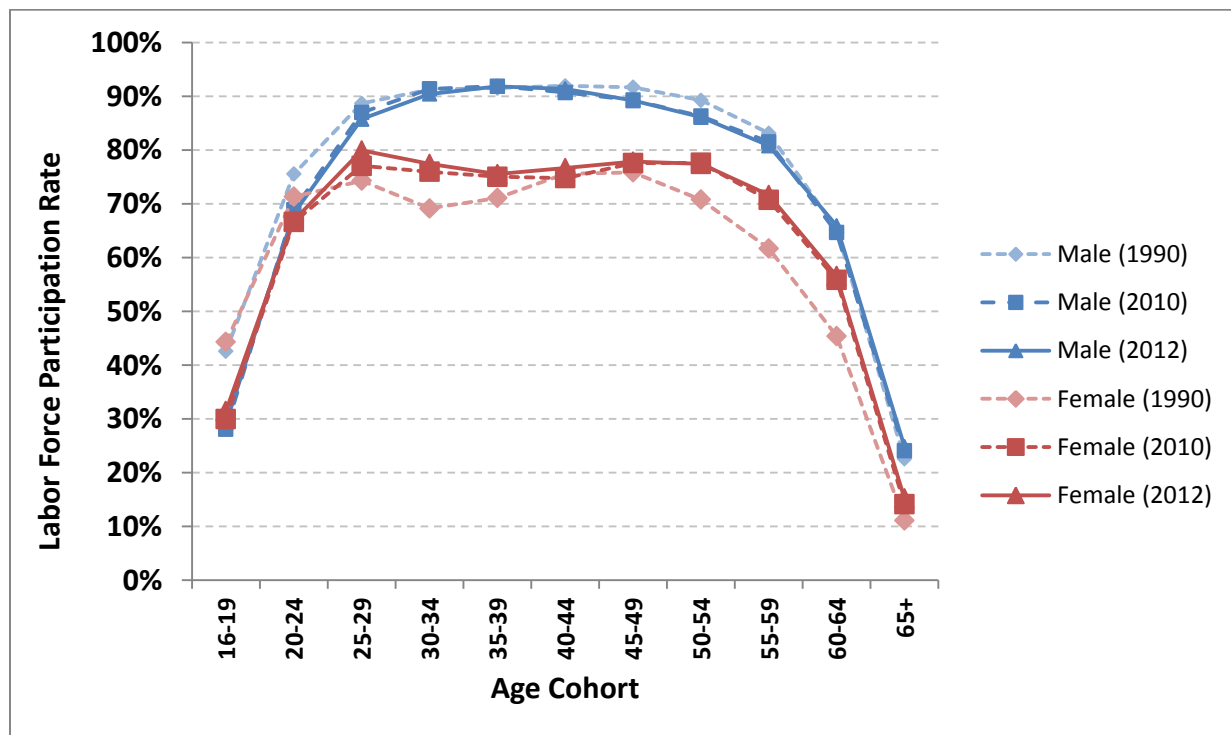
LFPR = Labor Force Participation Rate
 CLF = Civilian Labor Force
 POP = Resident population

CLF includes both employed and unemployed residents (i.e. those unemployed still actively looking for work) and excludes military personnel. The age/sex-specific labor force participation rate is calculated by taking the ratio of the age/sex-specific civilian labor force and dividing it by the corresponding total population within the appropriate age range.

4.2 Civilian Labor Force Participation Rates

Civilian labor force participation rates vary by geography, sex and age. The *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum presented a summary overview of the recent changes in labor force participation rates among men and women and found that while the labor force participation gap between men and women remains large, it has decreased noticeably in recent decades. Figure 4-2 provides a snap shot of the change in male and female labor force participation between 1990 and 2010 within the 31-County Forecast Region. The Figure also includes more recent (2012) labor force participation rates to identify any anomalies in recorded participation rates that may have occurred as a result of the 'Great Recession'.

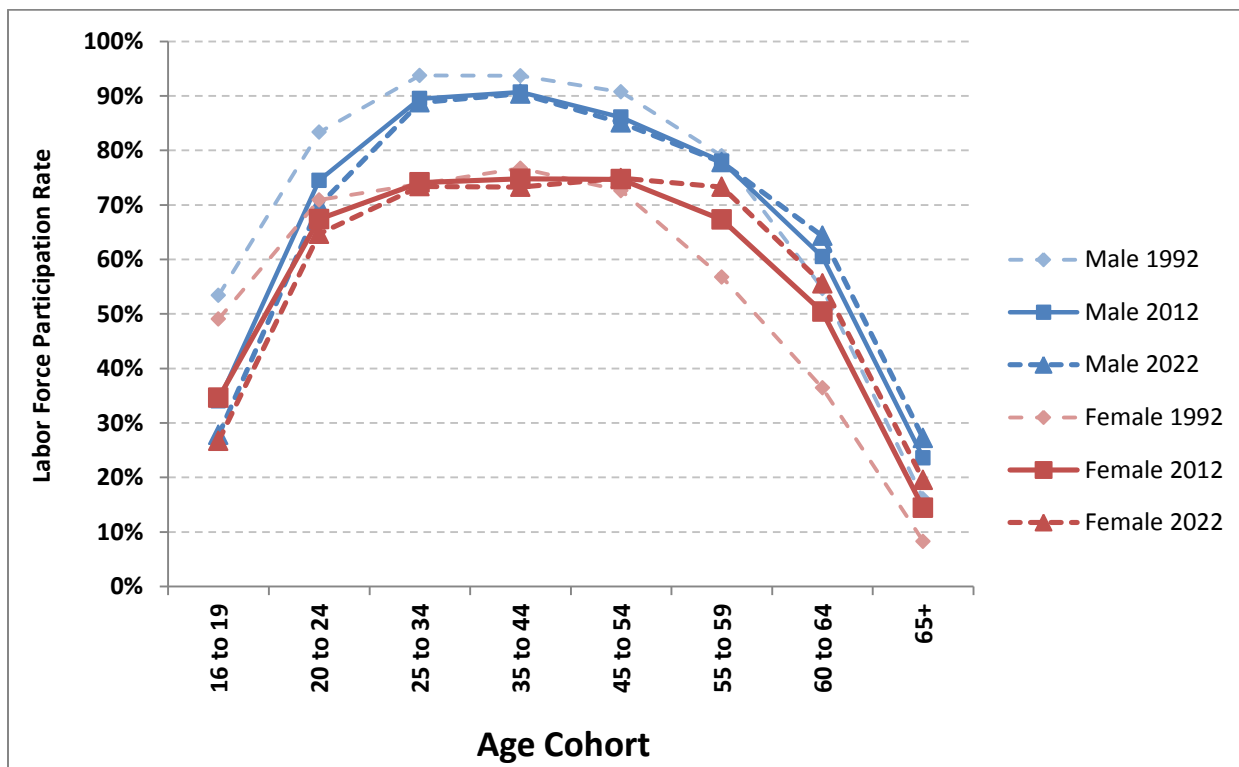
FIGURE 4-2. 31-COUNTY REGION LABOR FORCE PARTICIPATION RATES



Source: PUMS 1990, 2000, 2012

The difference between 2010 and 2012 male labor force participation rates is negligible and the same is largely true for females as well except in the younger age cohorts spanning 20-39. While male labor force participation rates have declined slightly since 1990, Figure 4-2 clearly shows that female labor force participation rates have increased substantially over that same interval and are likely to continue as various socioeconomic conditions (structural changes to the economy – transition from manufacturing to services, improved work place accommodations for childcare needs, legislative actions – fair/equal pay, etc.) continue to encourage further female participation. The Bureau of Labor Statistics National projections to 2022 in Figure 4-3 show some additional gains by female workers particularly among the prime and mature labor markets above 45 years of age.

FIGURE 4-3. NATIONAL LABOR FORCE PARTICIPATION RATES (1992, 2012, 2022)



Source: BLS

Estimates of age/sex specific labor force participation rates applied in the model were initially based on the calculations obtained from the 2010 PUMS. Labor force participation estimates were also obtained from the 2012 PUMS for two reasons: to identify any anomalies that may have resulted from the 'Great Recession'; and also to align with the BLS series that provides the basis for calculating the changes in age/sex-specific labor force participation rates.

The calculation of future year participation rates to be applied in the model were calculated based on changes implied by the BLS estimates for 2012-2022. The estimated change in BLS age/sex specific rates between 2012 and 2022 were used to interpolate national rates for 2015 and 2020 as shown in Table 4-1. The projected change in participation rates relative to 2012 estimates were calculated and these percentage changes were then applied to the 2012 PUMS estimates for each individual county – thereby providing an estimate of projected 2015 and 2020 participation rates. Given that the BLS series was only projected to 2022, the 2022 rates were held constant for 2025 and every other future forecast

year. A complete table listing the labor force participation rate assumptions for each of the individual counties is provided in Appendix D.

TABLE 4-1. LABOR FORCE PARTICIPATION RATES (BUREAU OF LABOR STATISTICS)

Age	Gender	Labor Force Participation Rate					% Δ from 2012		
		1992	2012	2015*	2020*	2022	2015	2020	2022
16 to 19	Male	53.4%	34.0%	32.1%	29.0%	27.8%	94.5%	85.4%	81.8%
20 to 24	Male	83.3%	74.5%	73.1%	70.8%	69.9%	98.1%	95.1%	93.8%
25 to 34	Male	93.8%	89.5%	89.3%	88.9%	88.8%	99.8%	99.4%	99.2%
35 to 44	Male	93.7%	90.7%	90.6%	90.5%	90.4%	99.9%	99.7%	99.7%
45 to 54	Male	90.7%	86.1%	85.8%	85.3%	85.1%	99.7%	99.1%	98.8%
55 to 59	Male	79.0%	78.0%	77.9%	77.8%	77.8%	99.9%	99.8%	99.7%
60 to 64	Male	54.7%	60.5%	61.6%	63.5%	64.3%	101.9%	105.0%	106.3%
65+	Male	16.1%	23.6%	24.7%	26.5%	27.2%	104.6%	112.2%	115.3%
16 to 19	Female	49.1%	34.6%	32.2%	28.3%	26.7%	93.2%	81.7%	77.2%
20 to 24	Female	70.9%	67.4%	66.6%	65.2%	64.7%	98.8%	96.8%	96.0%
25 to 34	Female	73.9%	74.1%	73.9%	73.5%	73.4%	99.7%	99.2%	99.1%
35 to 44	Female	76.7%	74.8%	74.4%	73.6%	73.3%	99.4%	98.4%	98.0%
45 to 54	Female	72.6%	74.7%	74.8%	74.9%	74.9%	100.1%	100.2%	100.3%
55 to 59	Female	56.8%	67.3%	69.1%	72.1%	73.3%	102.7%	107.1%	108.9%
60 to 64	Female	36.4%	50.4%	52.0%	54.6%	55.6%	103.1%	108.3%	110.3%
65+	Female	8.3%	14.4%	15.9%	18.5%	19.5%	110.6%	128.3%	135.4%

*Note: 2015 and 2020 rates are interpolated from the 2012 and 2022 rates

Source: BLS 2012-2022 Labor Force Participation Rate Projections, LBG 2015

4.3 Labor Induced Migration Estimates

As indicated in Figure 4-1, the labor demand implied by the employment forecasts was reconciled against labor supply estimates generated from the conversion of preliminary population forecasts into the labor force estimates. This reconciliation was achieved through the estimation of a labor induced migration adjustment that was to be applied to the initial estimate of net migration – calculated based on historical rates (Section 3.3.3.1). By linking migration – the most unpredictable component of population change – to employment, this methodological approach provides greater consistency with employment projections.

However, the assessment of labor flows into and out of the region was limited only to those industries likely to affect migration patterns – that is to say that the local serving industries (e.g. restaurants, food and accommodation, other personal services) were held out from the calculation of labor induced migration. Specifically, four industrial sectors were excluded from the labor supply and demand balance evaluation, namely:

- Retail Trade (NAICS: 44-45)
- Arts, Entertainment, Recreation (NAICS: 71)
- Accommodation & Food Services (NAICS: 72)
- Other Services (NAICS: 81)

Although these four industries were excluded from the labor balancing equation, it should be noted that the historical residual net migration estimate derived from the survival analysis discussed in Section 3.3.3.1 includes migrants into and out of the region from all industrial sectors. The focus of the labor balancing is on 'export based' industries. The simple expression below broadly represents the calculation of the labor induced migration adjustment.

$$\text{Labor Induced Migration Adjustment (LIMA)} = \text{Labor Demand}_{(\text{Basic Sectors})} - \text{Labor Supply}_{(\text{Basic Sectors})}$$

4.3.1 Labor Demand

For each five year interval in the forecasting process, the labor demand implied by the employment model is calculated by first aggregating the total volume of jobs in the 16 basic industry sectors excluding the four industries highlighted above. This includes jobs that are categorized as both Wage & Salary, as well as Self Employed. Based on the baseline employment forecasts discussed in Section 2.0 of this document, there are total number of 8,864,336 jobs in the Basic Industries projected in 2015 for the 31-County Forecast Region (Table 4-2).

TABLE 4-2. LABOR DEMAND – TOTAL BASIC INDUSTRY JOB PROJECTIONS

	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Forecast Region	8,787,064	8,561,552	8,410,708	8,864,336	9,175,878	9,358,350	9,532,028	9,757,226	10,006,631	10,253,120	10,508,146
New York City	3,628,434	3,431,629	3,471,583	3,721,159	3,814,277	3,880,159	3,941,899	4,018,214	4,107,953	4,198,709	4,293,854
Bronx County	276,427	279,294	290,334	317,313	326,572	334,007	341,462	349,423	359,196	368,145	377,823
Kings County	626,980	628,982	634,927	694,574	711,925	726,295	739,523	756,280	775,531	794,534	814,314
New York County	2,095,783	1,892,696	1,923,421	2,025,277	2,080,759	2,117,317	2,150,182	2,191,953	2,238,627	2,291,334	2,345,501
Queens County	539,755	541,922	528,979	579,409	588,595	593,670	599,911	607,524	618,908	626,387	635,174
Richmond County	89,489	88,735	93,922	104,587	106,427	108,870	110,821	113,036	115,690	118,309	121,042
Long Island	910,197	919,990	915,867	961,576	995,354	1,018,767	1,045,092	1,076,449	1,109,710	1,144,299	1,179,978
Nassau County	443,678	437,186	438,257	454,748	469,527	478,114	488,964	503,077	518,046	533,772	550,061
Suffolk County	466,519	482,805	477,611	506,827	525,827	540,652	556,129	573,372	591,664	610,528	629,917
Mid-Hudson	733,877	751,956	721,903	730,757	757,098	779,257	802,098	828,590	857,015	886,540	917,031
Dutchess County	91,621	94,005	90,809	89,443	93,185	96,679	99,993	103,500	107,410	111,525	115,861
Orange County	104,520	109,256	112,889	109,198	113,869	118,579	123,309	128,182	133,693	139,323	145,248
Putnam County	19,124	21,588	21,260	23,538	23,908	24,165	24,325	24,541	24,821	25,141	25,469
Rockland County	91,670	94,242	88,142	91,232	95,512	99,157	102,870	107,003	111,251	115,709	120,265
Sullivan County	20,892	21,880	20,838	20,558	22,715	24,437	27,329	30,253	33,141	36,005	38,878
Ulster County	53,593	53,067	48,936	49,523	50,228	50,794	51,606	52,775	54,021	55,371	56,745
Westchester County	352,457	357,917	339,029	347,264	357,680	365,444	372,666	382,334	392,677	403,466	414,567
New Jersey	2,723,405	2,700,193	2,570,160	2,700,089	2,827,856	2,884,095	2,928,099	2,998,590	3,072,730	3,140,787	3,209,721
Bergen County	387,543	374,980	344,762	370,298	384,771	395,938	402,900	414,329	426,244	437,037	448,145
Essex County	352,456	341,994	326,079	322,537	339,019	343,481	348,448	357,412	367,428	376,457	385,842
Hudson County	243,863	236,767	231,675	241,357	258,664	265,776	272,653	282,521	292,711	301,689	310,860
Hunterdon County	43,167	46,754	45,186	46,920	48,303	48,590	48,859	50,123	51,531	52,943	54,444
Mercer County	204,875	209,342	201,000	213,665	224,771	230,347	235,530	242,443	249,485	255,899	262,349
Middlesex County	333,257	326,223	307,741	332,260	347,238	353,622	358,637	366,703	374,620	381,261	387,558
Monmouth County	201,912	217,166	212,409	207,755	215,768	217,549	217,825	220,668	224,148	227,820	231,651
Morris County	259,920	260,818	238,766	252,500	262,746	266,207	268,118	271,583	274,805	278,052	281,276
Ocean County	105,956	119,809	122,827	134,767	143,596	148,737	151,920	155,655	159,883	164,275	168,716
Passaic County	163,601	155,216	143,729	147,701	153,790	157,298	160,602	165,293	170,378	175,343	180,510
Somerset County	156,693	147,754	146,600	167,872	175,516	179,234	181,622	185,083	188,571	191,456	194,022
Sussex County	31,049	35,811	33,948	36,150	37,517	38,122	38,499	39,080	39,773	40,453	41,166
Union County	211,778	196,621	187,651	198,416	207,254	209,832	212,761	217,600	222,514	227,087	231,794
Warren County	27,334	30,940	27,789	27,891	28,904	29,364	29,725	30,097	30,639	31,015	31,388
Connecticut	791,150	757,784	731,194	750,755	781,293	796,072	814,840	835,382	859,223	882,784	907,561
Fairfield County	407,780	384,893	374,939	388,263	403,832	412,335	422,756	434,241	447,542	460,837	474,770
Litchfield County	59,528	55,630	50,058	52,581	54,591	55,144	55,953	56,842	57,843	58,755	59,694
New Haven County	323,842	317,261	306,197	309,911	322,869	328,593	336,131	344,300	353,839	363,192	373,098

An adjustment is applied to account for the number of multiple job-holders. It is initially assumed that 7 percent of workers hold multiple jobs, such that the total number of workers necessary to meet demand is actually less than the aggregate number of jobs. The estimated volume of workers required

to meet the employment demand in these industries is calculated by taking the total number of jobs and dividing by 1.07 to address multiple job holders. It should be noted that there is a final round of reconciliation of multiple job holder rates at the back end of the employment forecasts to ensure reasonable final rates (Section 2.7).

4.3.2 Labor Supply

The conversion of preliminary population projections into corresponding labor supply is performed through several steps.

Working force age population is derived from preliminary population projections that include the historical residual net-migration by age – the age/gender-specific historic net migration rates are initially set at the median of level of the historical sample of rates (Section 3.3.3.1). This working force age includes all population above 16. The working force age population obtained from the 15-19 age group is simply calculated by assuming that 80 percent of that population is over 16 years of age.

Military personnel estimates were calculated based on age/sex-specific rates of military service obtained from the 2010 PUMS estimates for each county. The resulting estimate of 2010 military personnel for each county was held constant for the duration of the forecasting horizon, and was held out of the calculation of civilian work force using labor force participation rates.

Civilian labor force was calculated by applying the age/sex-specific civilian labor force participation rates to the resulting estimate of working force age persons who were not serving in the military. The complete set of labor force participation rates is provided in Appendix D.

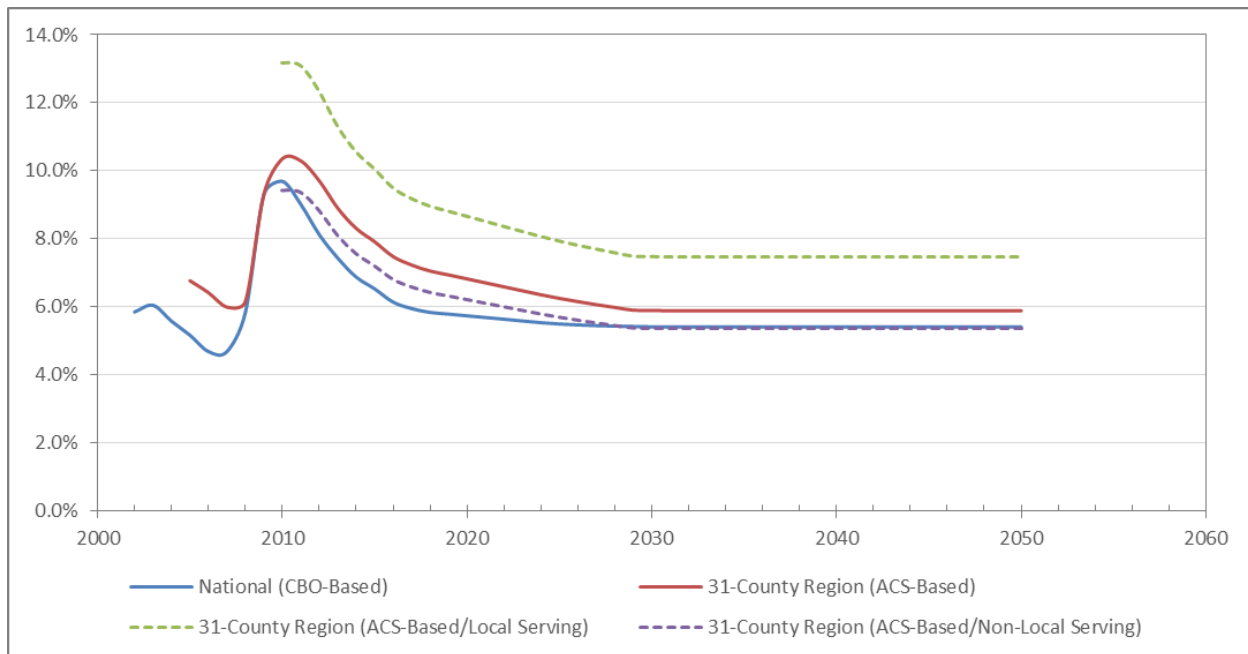
Non-basic (local serving) v. basic (non-local serving) age/sex/county-specific splits of the civilian labor force were calculated from the 2010 PUMS data and applied to the civilian labor force estimates discussed above to produce a county level volumes of workers in both industrial categories. The total regional volume of available workers in the non-local serving industries was simply aggregated from the all the counties.

Unemployment rates were applied to the resulting estimates of local and non-local serving labor force estimates. The unemployment assumptions were obtained from estimated future projections of national unemployment rates generated by the Congressional Budget Office (CBO) (Figure 4-4).

The February 2014 CBO projections that show the unemployment rate fall to 5.47 percent by 2024 were extrapolated to a rate of 5.35 percent by 2030 and held constant thereafter at a level that is considered to be the approximate rate of natural unemployment for the nation. Rates of unemployment in the 31-County Region were indexed to the projected CBO projections as demonstrated in Figure 4-4, and further split to distinguish between unemployment rates in the two broad categories (local v. non-local) – based on differentials relative to the total unemployment rate observed from the 2010 PUMS data. Regional estimates of the resident employed in the non-local serving industries were then obtained by excluding the estimated volume of unemployed workers

Net Commuters were also accounted for based on the 2006-2010 journey-to-work flows that indicated a net commuting in-flow equal to 1.35 percent. This percentage of workers was added to the volume of resident employed in the non-local serving industries as described above to arrive at the total volume of supplied labor.

FIGURE 4-4. NATIONAL & REGIONAL UNEMPLOYMENT ASSUMPTIONS



Source: CBO, Louis Berger 2015

4.3.3 Economic Migrant Calculation

The resulting estimate of labor supply generated by proceeding through the steps outlined above was compared to the corresponding labor demand also previously discussed. The difference between these two estimates represented the net regional inflow or outflow of migrants required to balance demand and supply. The following steps outline the ultimate calculation of the net migration adjustment for each individual county by age and sex before re-application in the final cohort component population projections.

Allocation of labor seeking migrant inflow/outflow to the individual counties was performed as a function of two factors: each county's proportional contribution to the change in employment forecasted for the five year interval; and the accounting for cross-commuting patterns associated with each county with respect to all other counties in the Forecast Region. The allocation of migrants into the region assumes that the currently observed patterns of commuting will hold for new labor induced migrants into the region.

To demonstrate the commuting pattern impact on the allocation factor calculation, even though Table 4-3 shows that Manhattan 20 percent of the growth in non-local serving industries between 2020 and 2025, only 7.3 percent of the net economic migrants would be allocated to Manhattan due to the fact that a large proportion of Manhattan jobs are filled by commuters from outside the Borough. However, for most counties outside New York City, there is a fairly close correspondence between each counties share of regional employment growth and associated allocation factors.

The county control total of labor seeking migrants into or out of the region was calculated by multiplying the regional volume described above, by the county-specific allocation factor for each time interval in Table 4-3. County control totals were distributed by age and sex using

preliminary labor force distributions of each specific forecasting interval – i.e. raw labor force volumes by age and sex derived from preliminary population interactions with labor force participation rates. Similar to the approach used in the previous NYMTC 2040 projections, it was assumed that labor seeking economic migrants were limited to workers between the ages of 20 and 64.

TABLE 4-3. REGIONAL LABOR INDUCED MIGRATION ADJUSTMENT COUNTY ALLOCATION FACTORS

	Share of Interval Employment Growth								Labor Force Model Reconciliation Allocation Factors							
	2015	2020	2025	2030	2035	2040	2045	2050	2015	2020	2025	2030	2035	2040	2045	2050
Forecast Region	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
New York City	55.0%	29.9%	36.1%	35.5%	33.9%	36.0%	36.8%	37.3%	46.7%	26.7%	31.8%	31.6%	30.3%	31.9%	32.4%	32.8%
Bronx County	5.9%	3.0%	4.1%	4.3%	3.5%	3.9%	3.6%	3.8%	6.7%	4.2%	5.2%	5.2%	4.7%	5.0%	5.0%	5.1%
Kings County	13.1%	5.6%	7.9%	7.6%	7.4%	7.7%	7.7%	7.8%	14.9%	7.9%	9.9%	9.6%	9.4%	9.8%	10.0%	10.1%
New York County	22.5%	17.8%	20.0%	18.9%	18.5%	18.7%	21.4%	21.2%	8.4%	6.5%	7.3%	7.0%	6.8%	6.9%	7.7%	7.6%
Queens County	11.1%	2.9%	2.8%	3.6%	3.4%	4.6%	3.0%	3.4%	13.5%	6.7%	7.3%	7.9%	7.6%	8.4%	7.9%	8.1%
Richmond County	2.4%	0.6%	1.3%	1.1%	1.0%	1.1%	1.1%	1.1%	3.2%	1.4%	2.1%	1.9%	1.8%	1.8%	1.9%	1.9%
Long Island	10.1%	10.8%	12.8%	15.2%	13.9%	13.3%	14.0%	14.0%	13.0%	11.8%	13.9%	16.0%	14.7%	14.4%	14.9%	14.9%
Nassau County	3.6%	4.7%	4.7%	6.2%	6.3%	6.0%	6.4%	6.4%	5.7%	5.1%	5.4%	6.5%	6.4%	6.3%	6.5%	6.6%
Suffolk County	6.4%	6.1%	8.1%	8.9%	7.7%	7.3%	7.7%	7.6%	7.3%	6.7%	8.5%	9.5%	8.3%	8.1%	8.4%	8.4%
Mid-Hudson	2.0%	8.5%	12.1%	13.2%	11.8%	11.4%	12.0%	12.0%	4.3%	9.6%	13.2%	14.2%	12.7%	12.5%	13.1%	13.1%
Dutchess County	-0.3%	1.2%	1.9%	1.9%	1.6%	1.6%	1.7%	1.7%	0.0%	1.3%	2.0%	2.0%	1.7%	1.7%	1.8%	1.8%
Orange County	-0.8%	1.5%	2.6%	2.7%	2.2%	2.2%	2.3%	2.3%	-0.2%	1.8%	2.8%	2.9%	2.4%	2.5%	2.5%	2.6%
Putnam County	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.5%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Rockland County	0.7%	1.4%	2.0%	2.1%	1.8%	1.7%	1.8%	1.8%	1.0%	1.5%	2.1%	2.1%	1.9%	1.8%	1.9%	1.9%
Sullivan County	-0.1%	0.7%	0.9%	1.7%	1.3%	1.2%	1.2%	1.1%	-0.1%	0.7%	1.0%	1.6%	1.3%	1.1%	1.2%	1.1%
Ulster County	0.1%	0.2%	0.3%	0.5%	0.5%	0.5%	0.5%	0.5%	0.1%	0.5%	0.7%	0.9%	0.8%	0.8%	0.9%	0.9%
Westchester County	1.8%	3.3%	4.3%	4.2%	4.3%	4.1%	4.4%	4.4%	2.9%	3.5%	4.3%	4.3%	4.3%	4.2%	4.4%	4.4%
New Jersey	28.6%	41.0%	30.8%	25.3%	31.3%	29.7%	27.6%	27.0%	31.4%	42.1%	32.8%	27.4%	33.0%	31.5%	29.9%	29.3%
Bergen County	5.6%	4.6%	6.1%	4.0%	5.1%	4.8%	4.4%	4.4%	4.8%	4.9%	5.4%	4.2%	4.9%	4.7%	4.5%	4.4%
Essex County	-0.8%	5.3%	2.4%	2.9%	4.0%	4.0%	3.7%	3.7%	1.3%	4.6%	2.8%	2.8%	3.6%	3.5%	3.3%	3.3%
Hudson County	2.1%	5.6%	3.9%	4.0%	4.4%	4.1%	3.6%	3.6%	2.7%	4.6%	3.7%	3.5%	3.9%	3.7%	3.5%	3.5%
Hunterdon County	0.4%	0.4%	0.2%	0.2%	0.6%	0.6%	0.6%	0.6%	0.8%	0.7%	0.5%	0.4%	0.7%	0.6%	0.6%	0.6%
Mercer County	2.8%	3.6%	3.1%	3.0%	3.1%	2.8%	2.6%	2.5%	2.5%	3.0%	2.5%	2.4%	2.5%	2.3%	2.2%	2.1%
Middlesex County	5.4%	4.8%	3.5%	2.9%	3.6%	3.2%	2.7%	2.5%	5.2%	5.1%	3.7%	3.2%	3.9%	3.5%	3.2%	3.0%
Monmouth County	-1.0%	2.6%	1.0%	0.2%	1.3%	1.4%	1.5%	1.5%	0.7%	3.3%	1.9%	1.2%	2.1%	2.1%	2.2%	2.1%
Morris County	3.0%	3.3%	1.9%	1.1%	1.5%	1.3%	1.3%	1.3%	2.5%	3.0%	2.0%	1.5%	1.9%	1.7%	1.7%	1.6%
Ocean County	2.6%	2.8%	2.8%	1.8%	1.7%	1.7%	1.8%	1.7%	2.6%	3.5%	3.1%	2.1%	2.1%	2.2%	2.2%	2.2%
Passaic County	0.9%	2.0%	1.9%	1.9%	2.1%	2.0%	2.0%	2.0%	1.7%	2.6%	2.4%	2.1%	2.5%	2.4%	2.3%	2.3%
Somerset County	4.7%	2.5%	2.0%	1.4%	1.5%	1.4%	1.2%	1.0%	3.0%	2.2%	1.7%	1.3%	1.6%	1.4%	1.3%	1.2%
Sussex County	0.5%	0.4%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.8%	0.9%	0.6%	0.5%	0.6%	0.6%	0.5%	0.5%
Union County	2.4%	2.8%	1.4%	1.7%	2.1%	2.0%	1.9%	1.8%	2.4%	3.1%	1.9%	1.9%	2.4%	2.3%	2.1%	2.1%
Warren County	0.0%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.4%	0.6%	0.4%	0.3%	0.4%	0.4%	0.3%	0.3%
Connecticut	4.3%	9.8%	8.1%	10.8%	9.1%	9.6%	9.6%	9.7%	4.6%	9.9%	8.3%	10.9%	9.3%	9.7%	9.7%	9.9%
Fairfield County	2.9%	5.0%	4.7%	6.0%	5.1%	5.3%	5.4%	5.5%	2.8%	4.5%	4.3%	5.4%	4.6%	4.8%	4.9%	5.0%
Litchfield County	0.6%	0.6%	0.3%	0.5%	0.4%	0.4%	0.4%	0.4%	0.6%	0.9%	0.5%	0.8%	0.6%	0.7%	0.6%	0.6%
New Haven County	0.8%	4.2%	3.1%	4.3%	3.6%	3.8%	3.8%	3.9%	1.2%	4.5%	3.5%	4.7%	4.0%	4.2%	4.2%	4.3%

Economic migrant dependents were also accounted for in the volume of total labor induced migration into or out of the region. The total volume of labor migrant workers (i.e. those between the ages of 20 and 64 as described above) was multiplied by the corresponding age-specific dependency ratios observed in the 2010 population. That is to say the ratio of males aged 0-4, to all male workers aged 20-64 in 2010, was applied to the total volume of male economic migrant workers 20-64 in a given forecast year to arrive at the corresponding volume of male economic migrant dependents aged 0-4. Economic migrant dependents were limited

only to those aged 0-19 given that retirees (those above 65) are typically considered to be largely unaffected by changes in local economic conditions.³⁷

The resulting total volume of labor induced migrants for each of the 26 counties is presented in Table 4-4. These numbers represent the incremental migrant workers (and their estimated dependents) required to match regional population growth to regional employment growth.

TABLE 4-4. LABOR INDUCED MIGRANTS (31-COUNTY REGION)

Forecast Region	Labor Induced Migrants							
	2015	2020	2025	2030	2035	2040	2045	2050
Forecast Region	(188,099)	3,358	170,452	284,052	363,537	371,556	373,049	423,355
Bronx County	(13,391)	148	9,322	15,697	18,158	19,672	19,784	22,917
Kings County	(28,325)	266	16,951	27,483	34,388	36,444	37,617	42,925
New York County	(14,002)	192	10,922	17,414	21,818	22,641	25,135	28,449
Queens County	(24,479)	217	11,963	21,399	26,467	29,869	28,121	32,947
Richmond County	(6,048)	47	3,527	5,284	6,391	6,830	6,980	7,948
New York City	(86,245)	869	52,686	87,276	107,223	115,457	117,637	135,186
Nassau County	(10,910)	173	9,306	18,712	23,423	23,724	24,653	28,156
Suffolk County	(14,038)	228	14,743	27,266	30,795	30,462	31,823	35,996
Long Island	(24,948)	400	24,050	45,978	54,218	54,185	56,477	64,152
Dutchess County	(66)	44	3,370	5,625	6,088	6,259	6,677	7,686
Orange County	382	64	5,101	8,867	9,451	9,723	10,072	11,562
Putnam County	(876)	11	691	1,083	1,360	1,412	1,511	1,714
Rockland County	(2,135)	55	3,843	6,541	7,553	7,314	7,666	8,633
Sullivan County	118	23	1,649	4,580	4,604	4,249	4,296	4,748
Ulster County	(151)	16	1,168	2,408	2,952	2,953	3,179	3,593
Westchester County	(5,652)	121	7,506	12,414	15,769	15,953	16,842	19,105
Mid-Hudson	(8,378)	334	23,328	41,519	47,777	47,864	50,244	57,041
Bergen County	(9,080)	163	9,169	11,743	17,706	17,308	16,516	18,647
Essex County	(2,574)	157	4,883	8,187	13,345	13,396	12,615	14,269
Hudson County	(4,886)	148	5,948	9,493	13,527	13,178	12,468	14,010
Hunterdon County	(1,505)	25	783	1,099	2,418	2,391	2,298	2,573
Mercer County	(4,711)	101	4,315	6,854	9,250	8,725	8,088	8,896
Middlesex County	(9,769)	170	6,374	9,041	13,985	13,142	11,859	12,735
Monmouth County	(1,351)	112	3,342	3,439	7,677	8,005	8,124	9,132
Morris County	(4,702)	101	3,409	4,242	6,889	6,453	6,295	6,966
Ocean County	(5,217)	122	5,498	6,092	8,126	8,405	8,670	9,642
Passaic County	(3,275)	90	4,294	6,241	9,272	9,141	8,846	10,024
Somerset County	(5,797)	75	2,920	3,794	5,748	5,420	4,863	5,117
Sussex County	(1,462)	29	1,093	1,333	2,048	2,068	2,027	2,289
Union County	(4,672)	107	3,317	5,578	8,880	8,525	8,027	8,960
Warren County	(689)	20	713	945	1,388	1,513	1,296	1,429
New Jersey	(59,691)	1,420	56,058	78,080	120,259	117,671	111,992	124,689
Fairfield County	(5,403)	157	7,503	15,647	17,306	18,409	18,806	21,591
Litchfield County	(1,090)	28	900	2,109	2,292	2,418	2,347	2,681
New Haven County	(2,344)	150	5,926	13,443	14,463	15,552	15,547	18,015
Connecticut	(8,837)	335	14,330	31,199	34,060	36,379	36,700	42,286
26-County Region	(101,854)	2,489	117,766	196,776	256,314	256,099	255,412	288,169

Land use constraints. The final computation in the labor induced migration adjustment calculation was an explicit accounting of land use constraints – particularly in New York City, where a rigorous evaluation of housing capacity was conducted as previously discussed in the Introduction to this document, and further detailed in Section 3.2.2.

The Project Team in consultation with the FWG, concluded that employment driven attraction to New York City, should not be limited by the land use/housing constraints discussed in Section 3.2.2. Therefore, the volume of total economic migrants (workers and dependents) that could not be accommodated within New York City were re-allocated to the surrounding commuting shed in proportion to commuting patterns currently observed in recent data (Table 4-5).

TABLE 4-5. NYC COMMUTING ORIGINS BY COUNTY (2006–2010 ACS)

	NYC	Bronx County	Kings County	New York County	Queens County	Richmond County
Bronx County, NY	10.99%	63.44%	2.64%	8.39%	3.23%	0.51%
Kings County, NY	24.24%	3.79%	70.50%	17.12%	10.44%	5.58%
New York County, NY	18.36%	7.62%	3.16%	30.47%	3.01%	1.18%
Queens County, NY	21.71%	5.90%	11.23%	16.21%	64.44%	1.73%
Richmond County, NY	4.44%	0.44%	3.96%	2.32%	0.85%	79.87%
Nassau County, NY	4.74%	1.78%	3.34%	4.17%	10.55%	0.75%
Suffolk County, NY	1.90%	0.94%	1.35%	1.77%	3.75%	0.58%
Dutchess County, NY	0.19%	0.39%	0.05%	0.24%	0.08%	0.02%
Orange County, NY	0.42%	1.12%	0.19%	0.48%	0.18%	0.10%
Putnam County, NY	0.16%	0.50%	0.04%	0.18%	0.05%	0.02%
Rockland County, NY	0.57%	1.59%	0.20%	0.65%	0.23%	0.14%
Sullivan County, NY	0.03%	0.04%	0.01%	0.03%	0.03%	0.00%
Ulster County, NY	0.07%	0.05%	0.03%	0.09%	0.04%	0.02%
Westchester County, NY	2.92%	8.38%	0.50%	3.62%	0.82%	0.10%
Bergen County, NJ	1.92%	1.83%	0.36%	2.91%	0.63%	0.33%
Essex County, NJ	0.96%	0.34%	0.33%	1.50%	0.26%	0.47%
Hudson County, NJ	2.00%	0.47%	0.45%	3.32%	0.34%	0.58%
Hunterdon County, NJ	0.04%	0.00%	0.01%	0.08%	0.01%	0.05%
Mercer County, NJ	0.17%	0.00%	0.07%	0.28%	0.03%	0.06%
Middlesex County, NJ	0.90%	0.15%	0.42%	1.29%	0.24%	2.53%
Monmouth County, NJ	0.77%	0.08%	0.47%	1.04%	0.15%	2.99%
Morris County, NJ	0.34%	0.09%	0.07%	0.55%	0.07%	0.16%
Ocean County, NJ	0.14%	0.04%	0.11%	0.18%	0.04%	0.67%
Passaic County, NJ	0.29%	0.14%	0.10%	0.44%	0.11%	0.04%
Somerset County, NJ	0.23%	0.04%	0.07%	0.36%	0.04%	0.48%
Sussex County, NJ	0.05%	0.04%	0.02%	0.08%	0.02%	0.03%
Union County, NJ	0.54%	0.16%	0.17%	0.84%	0.11%	0.94%
Warren County, NJ	0.02%	0.02%	0.00%	0.03%	0.01%	0.01%
Fairfield County, CT	0.74%	0.52%	0.10%	1.19%	0.17%	0.02%
Litchfield County, CT	0.03%	0.02%	0.00%	0.05%	0.02%	0.02%
New Haven County, CT	0.10%	0.09%	0.05%	0.13%	0.05%	0.03%
TOP FIVE NON-NYC COMMUTING TRAVEL MARKETS & COMMUTING SHARES						
Nassau County, NY	23.38%	9.44%	39.15%	16.37%	58.48%	6.76%
Westchester County, NY	14.40%	44.57%	5.92%	14.22%	4.53%	0.86%
Hudson County, NJ	9.90%	2.49%	5.32%	13.02%	1.88%	5.23%
Bergen County, NJ	9.48%	9.71%	4.25%	11.42%	3.51%	2.93%
Suffolk County, NY	9.40%	5.01%	15.89%	6.92%	20.80%	5.18%
Subtotal	66.56%	71.22%	70.52%	61.95%	89.20%	20.98%

Because the 26-County model uses the land use-constrained NYC population forecasts from Section 3.2.3 as the direct input into the labor supply and demand reconciliation described above, the resulting estimate of labor induced migrants allocated to NYC in Table 4-4 by construction, also represents the City's excess volume of economic migrants.

Table 4-5 shows that outside of the five New York City Boroughs, the top five origins for commutes destined to either Manhattan or New York City as a whole are Nassau, Westchester, Hudson, Bergen, and Suffolk Counties. These five counties account for more than 60 percent of non-NYC commuting origins into the City, with Nassau and Westchester combining for almost 40 percent of the non-NYC commuting share into the city. These commuting patterns imply that these five counties are likely to be the most impacted by capacity constraints in New York City. The volume of total economic migrants into the five Boroughs that cannot be accommodated and require re-allocation to the surrounding commuting shed is presented in Table 4-6.

TABLE 4-6. EXCESS NYC ECONOMIC MIGRANT ALLOCATION TO SURROUNDING COUNTIES

	Excess New York City Migrants							
	2015	2020	2025	2030	2035	2040	2045	2050
Nassau County	-	279	16,539	27,963	34,658	37,760	37,626	43,429
Suffolk County	-	110	6,588	11,083	13,720	14,910	14,919	17,202
Long Island	-	390	23,126	39,046	48,378	52,670	52,544	60,632
Dutchess County	-	8	465	771	932	1,001	1,026	1,180
Orange County	-	21	1,292	2,140	2,585	2,775	2,838	3,263
Putnam County	-	7	442	735	879	945	967	1,113
Rockland County	-	27	1,660	2,752	3,312	3,558	3,639	4,186
Sullivan County	-	1	71	118	144	156	158	182
Ulster County	-	3	154	254	313	335	345	395
Westchester County	-	119	7,283	12,112	14,483	15,554	15,950	18,359
Mid-Hudson	-	185	11,366	18,883	22,649	24,324	24,923	28,677
Bergen County	-	57	3,397	5,588	6,834	7,295	7,583	8,690
Essex County	-	29	1,781	2,892	3,579	3,802	3,976	4,541
Hudson County	-	49	2,965	4,798	5,953	6,295	6,659	7,593
Hunterdon County	-	1	65	103	128	135	143	163
Mercer County	-	5	292	471	588	622	656	747
Middlesex County	-	37	2,421	3,842	4,743	5,043	5,238	5,976
Monmouth County	-	38	2,470	3,895	4,806	5,106	5,299	6,041
Morris County	-	9	525	850	1,052	1,115	1,175	1,340
Ocean County	-	8	545	860	1,060	1,128	1,165	1,330
Passaic County	-	9	552	905	1,120	1,193	1,241	1,420
Somerset County	-	8	501	795	982	1,042	1,090	1,242
Sussex County	-	2	127	207	255	273	282	323
Union County	-	18	1,148	1,832	2,260	2,399	2,507	2,860
Warren County	-	1	31	51	62	67	69	79
New Jersey	-	271	16,818	27,090	33,424	35,514	37,083	42,345
Fairfield County	-	18	1,085	1,780	2,184	2,321	2,439	2,789
Litchfield County	-	1	54	88	108	115	120	137
New Haven County	-	4	237	389	479	513	527	605
Connecticut	-	23	1,376	2,257	2,771	2,949	3,086	3,532
26-County Region	-	869	52,686	87,276	107,223	115,457	117,637	135,186

The excess economic migrants from in each NYC Borough (Table 4-4) were allocated to the remaining 26-Counties in proportion the each county's commuting contribution a given NYC Borough. For instance, 16.37 percent (Table 4-5) of the 10,922 excess economic migrants allocated to Manhattan in 2025, were re-allocated to Nassau County in recognition of Nassau's contribution to Manhattan commuting outside the five boroughs. The re-allocation exercise maintained the age/sex distributions of the initial economic migrant calculation described above.

Land use considerations for other non-NYC counties were accounted for through feedback received from members of the FWG based on iterations of the resulting population forecasts as discussed in Section 3.3.3.2.

4.4 Civilian Labor Force Estimates

Following the calculation of labor induced migration adjustments for the non-local serving industries, the total civilian labor force was calculated by summing the labor force associated with local serving industries, together with that of non-local serving industries (including LIMA). The resulting projections of total civilian labor force are presented in Table 4-7.

The calculation of the employed civilian labor force was performed by applying county specific unemployment rates derived from the CBO/ACS based projections discussed in Section 4.3.2, and as shown in by the scatter of historical and projected unemployment rates for all 31 counties in the Forecast Region in Figure 4-5. The resulting projections of employed civilian labor force are presented in Table 4-8.

The resulting employed labor force estimates by place of residence, were reconciled with employment forecasts by place of work as described in Section 2.7.

FIGURE 4-5. NATIONAL & REGIONAL UNEMPLOYMENT ASSUMPTIONS

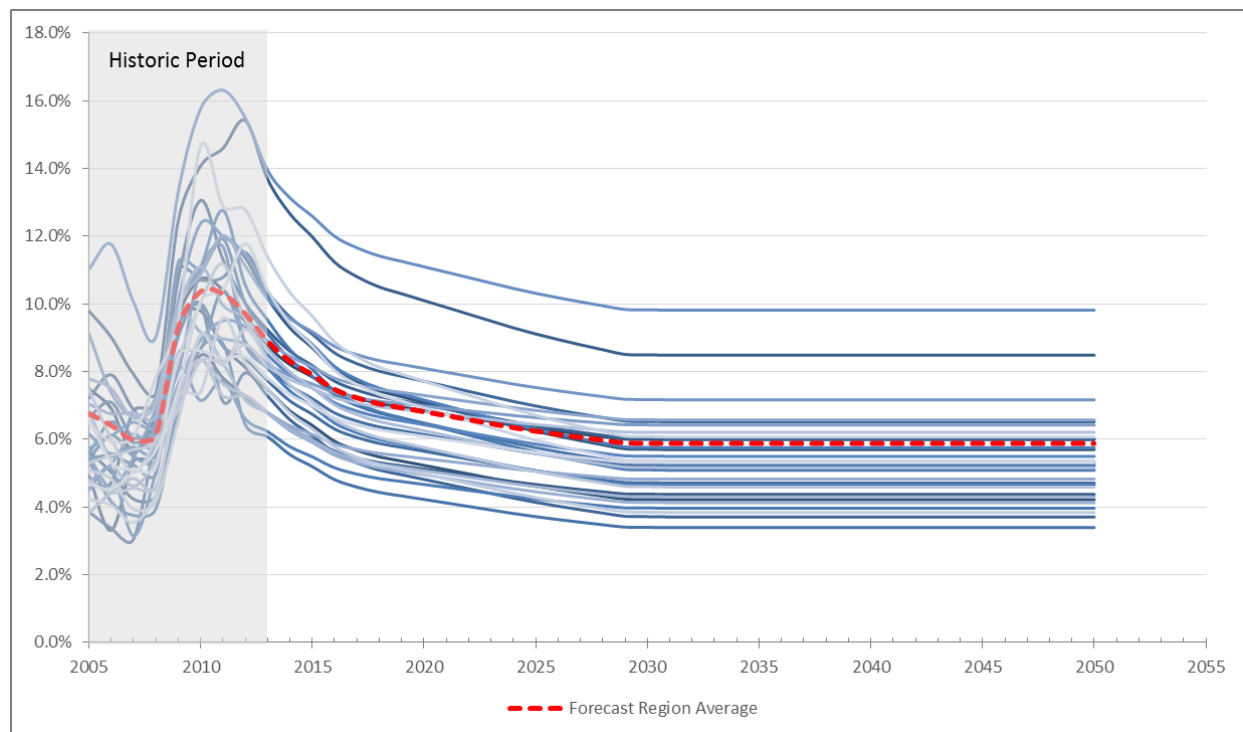


TABLE 4-7. CIVILIAN LABOR FORCE PROJECTIONS

	2010	2015	2020	2025	2030	2035	2040	2045	2050
FORECAST REGION	11,568,295	11,758,530	11,945,120	12,055,456	12,202,507	12,461,969	12,780,802	13,097,600	13,413,002
Bronx County	617,531	639,568	658,901	667,862	675,426	688,016	703,985	715,512	724,966
Kings County	1,236,176	1,268,601	1,298,927	1,313,280	1,331,047	1,357,935	1,383,097	1,394,596	1,399,489
New York County	921,966	939,387	963,700	967,339	968,735	976,121	985,267	990,676	991,260
Queens County	1,185,673	1,192,232	1,223,386	1,222,280	1,223,477	1,232,218	1,243,348	1,250,296	1,255,855
Richmond County	217,944	223,729	229,045	228,153	227,229	227,822	229,374	231,736	232,854
New York City Total	4,179,290	4,263,518	4,373,960	4,398,914	4,425,914	4,482,112	4,545,072	4,582,817	4,604,423
Nassau County	688,439	695,232	695,078	702,762	718,706	744,763	778,805	812,319	845,318
Suffolk County	784,674	777,227	780,721	784,788	792,891	808,366	830,276	853,771	877,474
Long Island Total	1,473,113	1,472,459	1,475,799	1,487,550	1,511,596	1,553,129	1,609,080	1,666,091	1,722,792
Dutchess County	155,789	162,101	162,202	162,102	163,052	166,082	171,058	177,149	182,767
Orange County	182,275	191,630	194,927	201,114	209,539	220,336	233,791	248,275	263,005
Putnam County	54,348	53,857	53,957	53,493	52,946	53,463	54,746	56,302	57,711
Rockland County	150,999	159,769	160,785	164,822	170,920	178,303	187,159	195,353	203,814
Sullivan County	39,099	38,618	38,403	38,589	40,268	41,642	42,892	44,158	45,530
Ulster County	94,826	94,852	94,947	94,476	94,418	95,299	96,177	97,455	98,608
Westchester County	497,887	501,871	506,684	516,215	528,333	547,161	567,671	591,054	618,046
Mid-Hudson Total	1,175,224	1,202,698	1,211,906	1,230,810	1,259,477	1,302,285	1,353,492	1,409,745	1,469,481
Bergen County	480,575	487,509	494,679	501,337	505,381	514,247	522,213	535,012	551,797
Essex County	400,430	410,232	414,817	421,755	430,353	440,565	452,600	465,424	481,733
Hudson County	360,289	366,115	371,580	380,344	395,707	413,267	430,422	445,884	460,872
Hunterdon County	69,840	75,029	75,563	74,387	72,630	72,654	73,626	75,507	77,217
Mercer County	195,951	194,390	197,576	202,630	209,043	218,086	227,716	237,992	248,754
Middlesex County	433,695	430,921	436,886	441,450	449,317	461,448	475,571	488,707	505,619
Monmouth County	333,624	337,687	338,259	334,837	330,274	332,534	337,918	345,868	351,740
Morris County	268,515	276,782	283,411	283,260	280,503	278,582	279,715	283,044	286,628
Ocean County	271,103	268,668	273,330	281,325	289,713	308,648	322,590	337,665	352,621
Passaic County	250,474	255,961	260,226	264,565	270,304	276,959	289,759	302,729	316,292
Somerset County	180,098	182,114	184,964	185,827	184,249	185,733	189,650	195,079	202,386
Sussex County	82,916	84,600	83,631	81,062	78,616	78,668	80,099	81,904	83,213
Union County	290,559	297,556	302,143	307,806	315,242	325,583	337,510	350,009	363,239
Warren County	58,848	59,523	60,089	59,956	59,422	59,117	60,198	61,300	62,202
New Jersey Total	3,676,918	3,727,085	3,777,155	3,820,540	3,870,753	3,966,089	4,079,586	4,206,122	4,344,313
Fairfield County	485,934	509,824	515,991	522,245	531,583	544,383	563,152	583,585	605,329
Litchfield County	106,195	110,609	110,090	108,323	106,406	106,066	106,976	109,140	110,958
New Haven County	471,620	472,336	480,219	487,073	496,778	507,905	523,444	540,100	555,705
Connecticut Total	1,063,750	1,092,770	1,106,300	1,117,641	1,134,767	1,158,354	1,193,572	1,232,825	1,271,993

TABLE 4-8. EMPLOYED CIVILIAN LABOR FORCE PROJECTIONS

	2010	2015	2020	2025	2030	2035	2040	2045	2050
FORECAST REGION	10,370,686	10,829,311	11,131,027	11,302,727	11,484,168	11,729,446	12,030,019	12,329,308	12,627,509
Bronx County	520,228	559,065	585,805	599,003	609,091	620,517	634,919	645,315	653,842
Kings County	1,101,924	1,152,228	1,193,810	1,214,446	1,235,586	1,260,650	1,284,009	1,294,684	1,299,227
New York County	837,475	867,651	896,415	903,122	906,501	913,458	922,017	927,079	927,625
Queens County	1,054,073	1,095,184	1,134,148	1,138,546	1,143,049	1,151,289	1,161,688	1,168,180	1,173,373
Richmond County	198,188	209,992	216,609	216,616	216,267	216,843	218,320	220,569	221,632
New York City Total	3,711,889	3,884,121	4,026,789	4,071,732	4,110,495	4,162,756	4,220,954	4,255,827	4,275,699
Nassau County	631,146	654,173	660,674	671,502	688,986	714,016	746,653	778,783	810,419
Suffolk County	719,152	730,791	741,118	748,692	758,764	773,624	794,592	817,079	839,763
Long Island Total	1,350,298	1,384,964	1,401,792	1,420,194	1,447,750	1,487,640	1,541,245	1,595,862	1,650,182
Dutchess County	140,167	149,906	152,065	153,054	154,632	157,520	162,239	168,016	173,344
Orange County	167,127	177,243	181,662	188,169	196,534	206,672	219,293	232,879	246,695
Putnam County	49,413	50,026	50,852	50,796	50,512	51,010	52,234	53,718	55,063
Rockland County	139,826	149,706	152,790	157,771	164,350	171,466	179,982	187,862	195,999
Sullivan County	33,369	34,896	35,440	36,001	37,821	39,117	40,291	41,480	42,769
Ulster County	85,282	86,545	88,367	88,834	89,345	90,191	91,022	92,231	93,323
Westchester County	455,021	466,811	475,858	487,252	500,251	518,112	537,534	559,676	585,235
Mid-Hudson Total	1,070,207	1,115,133	1,137,034	1,161,877	1,193,445	1,234,088	1,282,594	1,335,863	1,392,428
Bergen County	439,847	458,298	469,355	477,966	483,266	491,775	499,393	511,633	527,685
Essex County	344,101	361,096	372,938	383,338	393,804	403,207	414,222	425,958	440,885
Hudson County	313,256	336,181	345,519	355,988	371,874	388,410	404,534	419,065	433,152
Hunterdon County	62,863	70,448	71,926	71,309	69,932	69,962	70,898	72,710	74,357
Mercer County	174,984	176,692	182,340	188,484	195,401	203,876	212,879	222,485	232,546
Middlesex County	390,279	401,893	412,230	419,066	428,143	439,738	453,196	465,714	481,830
Monmouth County	304,710	313,377	317,498	316,150	312,989	315,156	320,259	327,793	333,359
Morris County	245,210	262,407	271,443	272,740	270,977	269,140	270,235	273,451	276,913
Ocean County	241,314	247,546	255,628	265,147	274,367	292,329	305,534	319,812	333,977
Passaic County	222,718	235,315	243,408	249,691	256,527	262,874	275,023	287,334	300,207
Somerset County	167,223	172,129	176,337	177,957	176,939	178,375	182,137	187,351	194,369
Sussex County	73,759	78,702	78,844	76,953	74,953	75,009	76,373	78,095	79,342
Union County	254,625	271,367	280,510	288,418	297,079	306,862	318,103	329,883	342,353
Warren County	53,593	55,051	56,228	56,445	56,153	55,869	56,891	57,932	58,785
New Jersey Total	3,288,483	3,440,502	3,534,201	3,599,652	3,662,405	3,752,583	3,859,677	3,979,216	4,109,759
Fairfield County	433,778	469,841	480,672	489,231	499,715	511,786	529,431	548,641	569,083
Litchfield County	95,796	103,520	104,335	103,331	101,914	101,597	102,469	104,541	106,282
New Haven County	420,236	431,229	446,203	456,709	468,444	478,995	493,650	509,358	524,075
Connecticut Total	949,810	1,004,590	1,031,210	1,049,271	1,070,073	1,092,378	1,125,549	1,162,540	1,199,440

5.0 HOUSEHOLD FORMATION MODEL

The calculation of households from population volumes is an important step in the demographic forecasting process as this variable represents a key unit of analysis in socioeconomic models and plays a crucial role in the regional model's operation. Similar to the population forecasts, separate projections of households were generated recognizing distinctions between New York City and the rest of the 26 counties in the Forecast Region.

5.1 Households – New York City

The treatment of households within the New York City model is briefly discussed in Section 3.2.2 of this document that addresses the assumptions used to create a housing based population projection.

The average household size for the United States has declined each decade since 1970, from 3.11 persons per household in 1970 to 2.58 in 2010 (Table 5-1). The average household size in New York City declined from 2.74 in 1970 to 2.49 in 1980, increased in the next two decades, to 2.54 in 1990 and to 2.59 in 2000, before declining to 2.57 in 2010. For these projections, the 2010 average household size was held constant because the direction in which household size is headed is not clear. Increases in immigration may portend increases in household size, while an increase in the number of non-family households with heads under the age of 65 may portend a drop in household size going forward. It is important to note that even small changes to average household size can have a major effect on a population as large as that of New York City.

TABLE 5-1. AVERAGE HOUSEHOLD SIZE

	1970	1980	1990	2000	2010
United States	3.11	2.75	2.63	2.59	2.58
New York City	2.74	2.49	2.54	2.59	2.57

Based on a review of the historical data on household size within the 31-County Region from the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum, the New York City Population Model approach of setting the average household size at fixed rate and applying that rate to projected household population levels is further justified given the subregion's virtually unchanged shares of household size distributions relative to the other subregions.

Following the estimation of population in households, the number of occupied housing units associated with the projected household population at each time point, was calculated by applying the 2010 decennial census average household size to the household population (Table 5-2). The resulting summary of households/occupied housing units is presented in

TABLE 5-2. OCCUPIED HOUSING UNIT CALCULATION

2010 Census Bureau Estimates (DCP adjusted population and housing in BK and GN)								
	Total Population	In group quarters	In households	Occupied HUs	Average Household Size	Vacant Units	Vacant to Occupied Ratio	Total Housing Units
NYC	8,242,624	185,530	8,057,094	3,135,092	2.57	239,910	0.07652	3,375,002
Bronx	1,385,108	46,710	1,338,398	483,449	2.77	28,447	0.05884	511,896
Brooklyn	2,552,911	35,609	2,601,121	934,946	2.78	65,347	0.06989	1,000,293
Manhattan	1,585,873	67,373	1,518,500	763,846	1.99	83,244	0.10898	847,090
Queens	2,250,002	28,000	2,222,001	787,335	2.82	51,732	0.06571	839,067
Staten Island	468,730	7,838	460,892	165,516	2.78	11,140	0.06730	176,656

TOTALS	2010					Change 2010 to 2050				
	Total Pop	GQ	HH Pop	Occ HUs	Total HUs	Total Pop	GQ	HH Pop	Occ HUs	Total HUs
NYC	8,242,624	185,530	8,057,094	3,135,092	3,375,002	918,396	0	918,396	316,039	339,156
Bronx	1,385,108	46,710	1,338,398	483,449	511,896	234,236	0	234,236	84,609	89,588
Brooklyn	2,552,911	35,609	2,517,302	934,946	1,000,293	345,169	0	345,169	93,940	100,505
Manhattan	1,585,873	67,373	1,518,500	763,846	847,090	115,725	0	115,725	58,213	64,557
Queens	2,250,002	28,000	2,222,002	787,335	839,067	188,645	0	188,645	66,844	71,236
Staten Island	468,730	7,838	460,892	165,516	176,656	34,621	0	34,621	12,433	13,270

TOTALS	2020					Change 2010 to 2020				
	Total Pop	GQ	HH Pop	Occ HUs	Total HUs	Total Pop	GQ	HH Pop	Occ HUs	Total HUs
NYC	8,550,971	185,530	8,365,441	3,223,015	3,469,718	308,347	0	308,347	87,923	94,717
Bronx	1,446,788	46,710	1,400,078	505,729	535,487	61,680	0	61,680	22,280	23,591
Brooklyn	2,648,452	35,609	2,612,843	939,160	1,004,801	95,541	0	95,541	4,213	4,508
Manhattan	1,638,281	67,373	1,570,908	790,209	876,326	52,408	0	52,408	26,363	29,236
Queens	2,330,295	28,000	2,302,295	815,786	869,387	80,293	0	80,293	28,451	30,320
Staten Island	487,155	7,838	479,317	172,133	183,718	18,425	0	18,425	6,617	7,062

TOTALS	2030					Change 2020 to 2030				
	Total Pop	GQ	HH Pop	Occ HUs	Total HUs	Total Pop	GQ	HH Pop	Occ HUs	Total HUs
NYC	8,821,027	185,530	8,635,497	3,325,508	3,579,767	270,056	0	270,056	102,492	110,049
Bronx	1,518,998	46,710	1,472,288	531,812	563,105	72,210	0	72,210	26,083	27,618
Brooklyn	2,754,009	35,609	2,718,400	977,101	1,045,394	105,557	0	105,557	37,941	40,593
Manhattan	1,676,720	67,373	1,609,347	809,544	897,769	38,439	0	38,439	19,336	21,443
Queens	2,373,551	28,000	2,345,551	831,113	885,721	43,256	0	43,256	15,327	16,334
Staten Island	497,749	7,838	489,911	175,937	187,779	10,594	0	10,594	3,805	4,061

TOTALS	2040					Change 2030 to 2040				
	Total Pop	GQ	HH Pop	Occ HUs	Total HUs	Total Pop	GQ	HH Pop	Occ HUs	Total HUs
NYC	9,025,145	185,530	8,839,615	3,400,921	3,660,443	204,118	0	204,118	75,413	80,676
Bronx	1,579,245	46,710	1,532,535	553,574	586,147	60,247	0	60,247	21,762	23,043
Brooklyn	2,840,525	35,609	2,804,916	1,008,198	1,078,885	86,516	0	86,516	31,097	33,271
Manhattan	1,691,617	67,373	1,624,244	817,038	906,079	14,897	0	14,897	7,494	8,310
Queens	2,412,649	28,000	2,384,649	844,967	900,485	39,098	0	39,098	13,854	14,764
Staten Island	501,109	7,838	493,271	177,144	189,067	3,360	0	3,360	1,207	1,288

TOTALS	2050					Change 2040 to 2050				
	Total Pop	GQ	HH Pop	Occ HUs	Total HUs	Total Pop	GQ	HH Pop	Occ HUs	Total HUs
NYC	9,161,020	185,530	8,975,490	3,451,131	3,714,158	135,875	0	135,875	50,210	53,715
Bronx	1,619,344	46,710	1,572,634	568,058	601,484	40,099	0	40,099	14,484	15,337
Brooklyn	2,898,080	35,609	2,862,471	1,028,886	1,100,798	57,555	0	57,555	20,688	22,133
Manhattan	1,701,598	67,373	1,634,225	822,059	911,647	9,981	0	9,981	5,021	5,568
Queens	2,438,647	28,000	2,410,647	854,179	910,303	25,998	0	25,998	9,212	9,817
Staten Island	503,351	7,838	495,513	177,949	189,926	2,242	0	2,242	805	859

TABLE 5-3. PROJECTED OCCUPIED HOUSING UNITS (2010-2050)

	2010	2015	2020	2025	2030	2035	2040	2045	2050
New York City	3,135,092	3,194,634	3,254,287	3,311,826	3,358,042	3,399,438	3,434,491	3,459,949	3,485,390
Bronx	483,449	494,508	505,729	519,631	531,812	543,188	553,574	560,926	568,058
Brooklyn	934,946	953,492	970,431	991,896	1,009,636	1,026,475	1,041,768	1,052,834	1,063,145
Manhattan	763,846	776,333	790,209	801,926	809,544	814,359	817,038	818,979	822,059
Queens	787,335	801,326	815,785	823,983	831,113	838,483	844,966	849,560	854,178
Staten Island	165,516	168,974	172,133	174,390	175,937	176,932	177,144	177,650	177,949

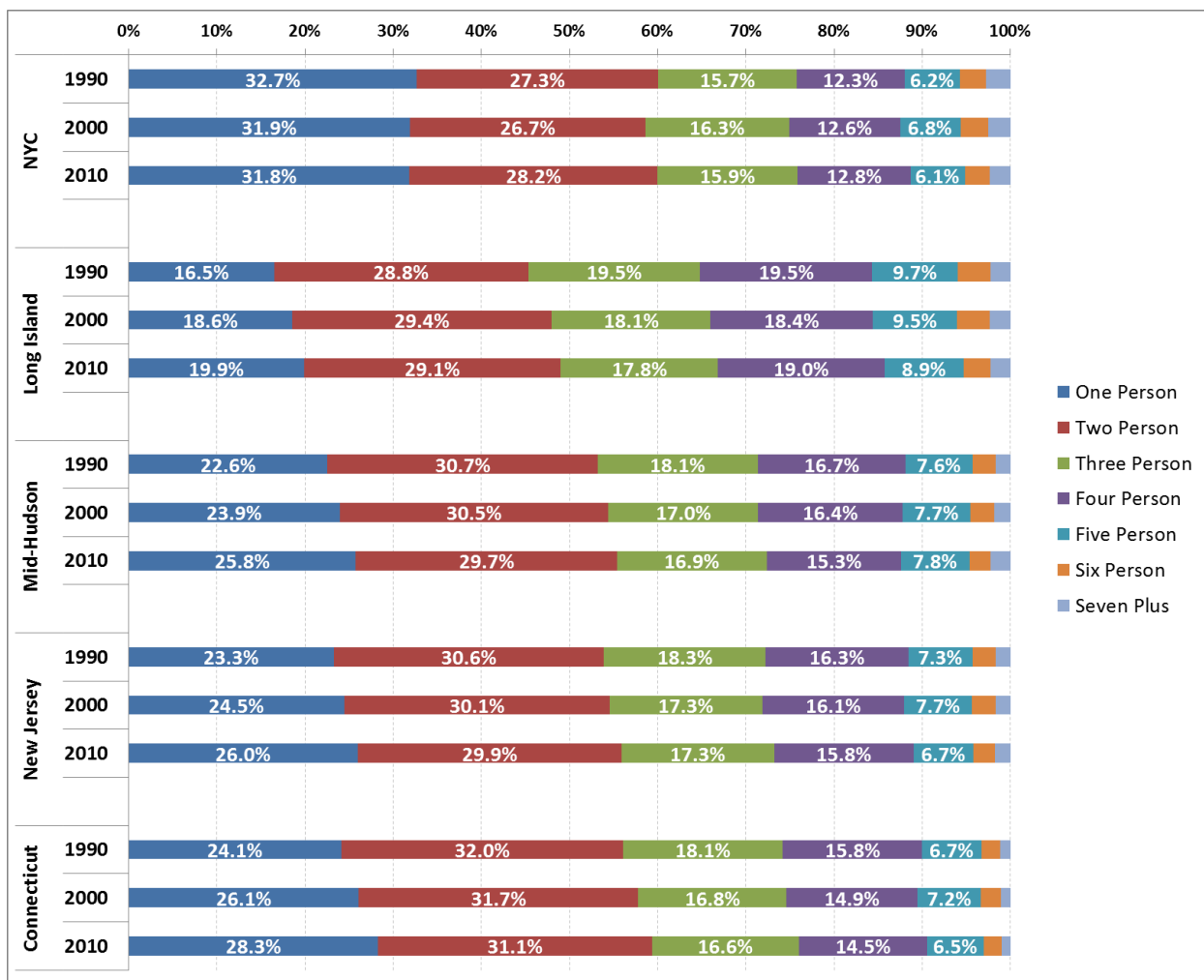
5.2 Households – 26-County Region

Unlike New York City that has displayed a consistent distribution of household sizes in recent history, the remaining four subregions have witnessed declines in average household size as discussed in the *Summaries and Analysis of Existing Trends and Key Factors for Forecasting* Technical Memorandum, and as also demonstrated by the increase in the proportion of single person households presented in Figure 5-1.

Given the changing rates of household size observed in the remaining four subregions, the estimation of households in the 26-County Region relied on the application of age -specific headship rates³⁸ observed historically. The use of age-specific headship rates helped account for changing household formation patterns, as subsequent waves of the household population were projected to advance into older age groups, each with differing rates of household formation as shown in Figure 5-2 that compares the subregions.

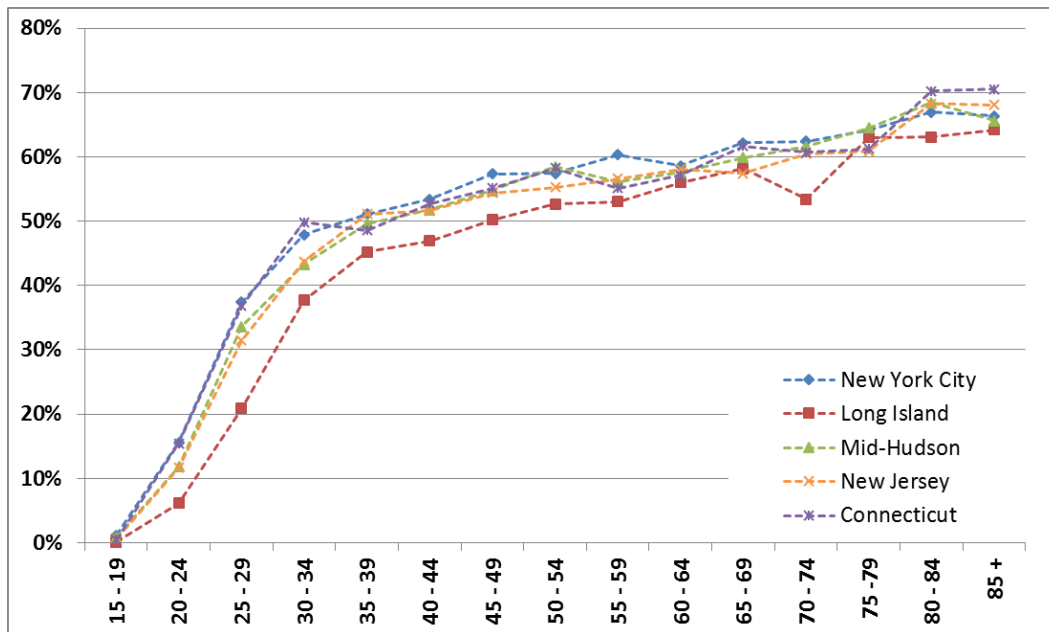
Figure 5-3 shows that the propensity to form households in the 26-County Region has generally dipped incrementally between 1990 and 2010, though younger age groups have seen some fluctuations (increases in 2000 followed by reductions in 2010) in the overall trend of household formation rates.

FIGURE 5-1. REGIONAL HOUSEHOLD SIZE DISTRIBUTIONS



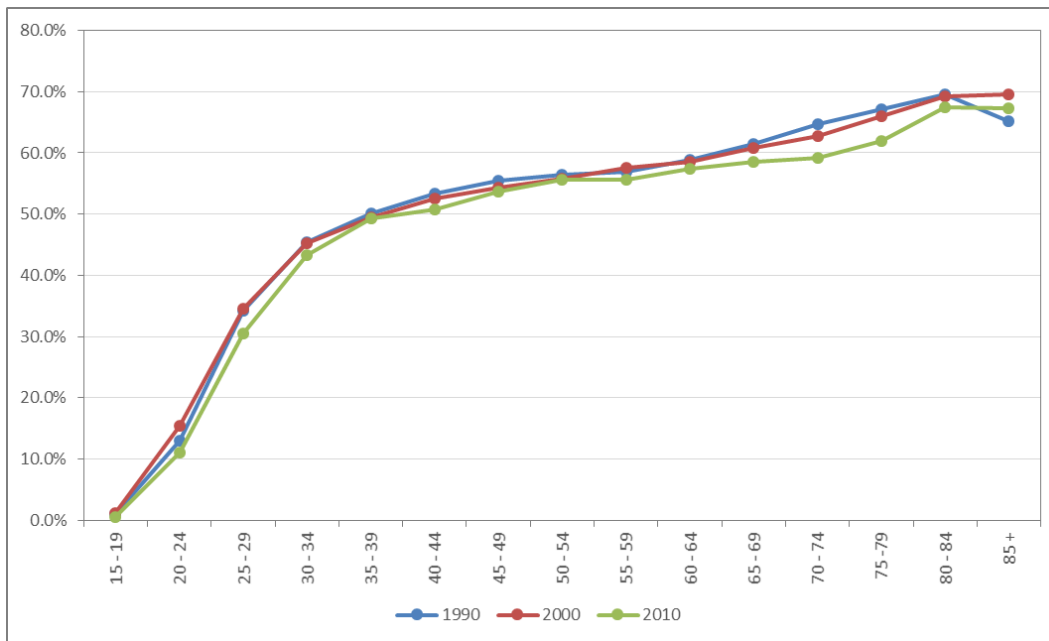
Source: 1990, 2000, 2010 Census PUMS

FIGURE 5-2. SUBREGIONAL HEADSHIP RATES BY AGE (2010)



Source: 2010 Census PUMS

FIGURE 5-3. 26-COUNTY REGION HEADSHIP RATES BY AGE (1990-2010)



Source: 1990, 2000, 2010 Census PUMS

The 1990, 2000 and 2010 county level headship rates obtained from the PUMS data were first modified through a calibration process designed to ensure correspondence with U.S. Census enumerations of households as demonstrated by the Westchester County example in Table 5-4. The 2010 base year

population (male and female – first two columns of Table) was multiplied by the raw PUMS headship ratios (third column), and the resulting aggregation of head of households (348,188) compared against the Census enumeration of 347,232. An adjusted head of households estimate was calculated for each age group by factoring the PUMS derived head of household estimates, by the ratio of the Census total household enumeration over the PUMS derived total – i.e. $347,232 \div 338,188$ in the Table 5-4 example. A revised set of headship rates was then calculated (sixth column) by dividing the adjusted head of household estimate (fifth column) by the total age group population (first and second columns).

This process was conducted for the three years of PUMS data (1990, 2000, and 2010) and the resulting adjusted headship rates were used to provide a range of possibilities to be applied in the calculation of future household volumes. The last six columns of Table 5-4 represent the range of options developed for the household forecasting process and include the adjusted 1990 to 2010 headship rates, as well as a minimum, maximum, and average value of all three years.

TABLE 5-4. HEADSHIP RATE CALIBRATION EXAMPLE

2010 Base Year HH Population		2010 Headship		2010 Adjusted Headship		Adjusted Headship Rates					
Males	Females	Ratio	Head of HH	Head of HH	Ratio	Adjusted Headship Rates					
						1990	2000	2010	Min	Max	Average
29,238	27,784										
32,156	30,872										
33,130	31,951										
30,589	28,258	1.0%	597	595	1.0%	1.1%	1.7%	1.0%	1.0%	1.7%	1.3%
24,938	23,143	11.9%	5,724	5,708	11.9%	14.2%	18.1%	11.9%	11.9%	18.1%	14.7%
25,509	25,683	33.3%	17,067	17,020	33.2%	35.2%	35.3%	33.2%	33.2%	35.3%	34.6%
26,318	27,881	42.7%	23,123	23,059	42.5%	46.5%	46.2%	42.5%	42.5%	46.5%	45.1%
29,023	31,685	50.0%	30,344	30,261	49.8%	50.4%	49.1%	49.8%	49.1%	50.4%	49.8%
33,441	36,611	52.8%	37,012	36,910	52.7%	53.5%	53.3%	52.7%	52.7%	53.5%	53.2%
35,857	39,170	55.7%	41,779	41,664	55.5%	55.0%	54.0%	55.5%	54.0%	55.5%	54.9%
34,270	37,422	60.3%	43,209	43,090	60.1%	56.1%	55.0%	60.1%	55.0%	60.1%	57.1%
28,680	32,251	56.3%	34,322	34,227	56.2%	57.2%	58.6%	56.2%	56.2%	58.6%	57.3%
24,586	27,868	58.9%	30,910	30,825	58.8%	58.8%	58.5%	58.8%	58.5%	58.8%	58.7%
17,350	21,071	60.6%	23,274	23,210	60.4%	60.0%	60.8%	60.4%	60.0%	60.8%	60.4%
12,541	16,591	62.6%	18,231	18,181	62.4%	64.2%	63.5%	62.4%	62.4%	64.2%	63.4%
10,372	14,141	64.7%	15,866	15,822	64.5%	68.0%	64.6%	64.5%	64.5%	68.0%	65.7%
8,228	12,561	70.1%	14,575	14,535	69.9%	67.3%	67.2%	69.9%	67.2%	69.9%	68.1%
6,442	12,798	63.2%	12,157	12,123	63.0%	66.6%	69.8%	63.0%	63.0%	69.8%	66.5%
442,668	477,741		348,188	347,232							
920,409			347,232	347,232							

Although future headship rates can reasonably be expected to continue in their decline based on the evidence of the recent past (Figure 5-3), it is uncertain the degree to which current trends may extend into the future. Furthermore, there is significant variation in the age-specific direction of change in headship rates on an individual county basis. For these reasons, the Project Team elected to primarily rely on the 2010 headship rates obtained from the PUMS data, to estimate household formation rates by multiplying the adjusted age-specific headship rates against the corresponding household population (both male and female). Where necessary to ensure a reasonable continuation of the trend of declining average household size, the minimum headship rates were applied to derive future household estimates. Consistent with the trends presented in Figure 5-3, and as indicated in by the shaded cells in Table 5-4, the adjusted 2010 rates are most often the minimum value headship rate value for most age groups, and this modification represents a small deviation from the general approach. The headship rates used to generate the household forecast are presented in Table 5-5. The resulting estimates of projected households are presented in Table 5-6.

TABLE 5-5. 26-COUNTY HEADSHIP RATE ASSUMPTIONS

Region	Headship Rate Series	Age-Specific Headship Rate														
		15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 +
Nassau County	Min 1990-2010	0.1%	5.6%	20.5%	38.8%	44.9%	46.5%	49.2%	52.9%	51.0%	56.8%	57.1%	54.1%	61.8%	61.8%	53.3%
Suffolk County	Min 1990-2010	0.1%	6.3%	21.7%	37.5%	45.6%	48.4%	52.2%	53.7%	55.2%	56.0%	59.0%	53.9%	61.0%	62.5%	57.0%
LI	Min 1990-2010	0.1%	6.2%	21.1%	38.2%	45.7%	47.5%	50.8%	53.3%	53.7%	56.6%	58.9%	54.0%	61.5%	63.9%	54.9%
Dutchess County	Adjusted 2010	1.0%	12.2%	34.1%	43.6%	51.1%	54.0%	56.9%	61.6%	57.6%	60.3%	62.0%	64.0%	66.2%	71.7%	64.6%
Orange County	Adjusted 2010	0.0%	12.3%	38.9%	44.8%	49.9%	52.7%	53.7%	55.7%	59.2%	57.5%	56.0%	61.7%	74.0%	67.3%	68.3%
Putnam County	Adjusted 2010	1.0%	11.2%	31.5%	40.3%	47.2%	49.9%	52.5%	56.9%	53.2%	55.6%	57.2%	59.1%	61.1%	66.2%	59.6%
Rockland County	Adjusted 2010	1.1%	10.5%	29.2%	46.0%	48.5%	46.3%	52.4%	52.4%	53.0%	51.6%	61.6%	57.5%	57.7%	61.8%	80.2%
Sullivan County	Adjusted 2010	1.1%	12.7%	35.5%	45.5%	53.3%	56.3%	59.4%	64.2%	60.0%	62.8%	64.6%	66.7%	69.0%	74.7%	67.3%
Ulster County	Adjusted 2010	1.1%	12.6%	35.2%	45.1%	52.8%	55.8%	58.9%	63.7%	59.5%	62.3%	64.0%	66.1%	68.4%	74.1%	66.8%
Westchester County	Adjusted 2010	1.0%	11.9%	33.2%	42.5%	49.8%	52.7%	55.5%	60.1%	56.2%	58.8%	60.4%	62.4%	64.5%	69.9%	63.0%
MH	Adjusted 2010	0.9%	11.9%	33.9%	43.7%	50.1%	52.3%	55.3%	59.0%	56.7%	58.1%	60.5%	62.2%	65.1%	69.1%	66.2%
Bergen County	Min 1990-2010	0.9%	9.6%	28.5%	43.9%	49.2%	50.7%	52.8%	50.8%	55.5%	56.7%	57.9%	62.9%	63.2%	67.0%	61.1%
Essex County	Adjusted 2010	1.0%	15.3%	37.1%	44.4%	56.5%	54.0%	56.4%	60.3%	57.4%	56.5%	66.2%	60.8%	68.5%	76.4%	72.1%
Hudson County	Adjusted 2010	1.7%	13.0%	40.4%	48.4%	54.4%	60.1%	61.2%	58.6%	57.8%	62.0%	57.3%	63.9%	63.0%	77.9%	74.2%
Hunterdon County	Adjusted 2010	0.0%	7.0%	22.2%	48.1%	45.9%	49.7%	60.5%	55.4%	57.1%	66.9%	55.0%	61.2%	53.0%	75.2%	54.3%
Mercer County	Min 1990-2010	0.0%	16.9%	35.3%	43.5%	50.1%	52.9%	53.3%	55.9%	58.5%	56.9%	61.9%	64.2%	67.3%	61.5%	68.5%
Middlesex County	Min 1990-2010	0.4%	11.1%	30.3%	44.6%	48.8%	50.5%	54.2%	54.2%	54.2%	54.4%	57.8%	56.4%	54.1%	70.0%	61.0%
Monmouth County	Min 1990-2010	0.6%	10.5%	28.2%	44.8%	49.9%	49.7%	52.8%	57.8%	58.0%	57.4%	60.6%	64.4%	64.3%	67.6%	67.9%
Morris County	Adjusted 2010	0.5%	9.4%	25.8%	39.6%	54.1%	52.0%	53.4%	58.8%	56.9%	60.9%	59.0%	57.7%	57.7%	66.1%	70.5%
Ocean County	Adjusted 2010	0.1%	10.4%	31.0%	44.5%	47.2%	55.1%	54.6%	54.3%	59.6%	60.7%	57.4%	63.8%	65.2%	69.0%	76.4%
Passaic County	Adjusted 2010	0.4%	10.7%	31.3%	42.4%	47.9%	50.9%	49.8%	55.4%	60.1%	59.4%	56.8%	51.3%	56.0%	53.8%	83.2%
Somerset County	Min 1990-2010	0.4%	13.2%	29.4%	40.4%	50.6%	50.3%	54.4%	51.4%	55.2%	56.8%	54.5%	59.2%	62.7%	61.9%	64.1%
Sussex County	Adjusted 2010	0.0%	10.6%	30.4%	42.0%	50.7%	51.2%	58.0%	62.3%	52.8%	62.4%	49.8%	59.3%	55.1%	68.0%	60.9%
Union County	Min 1990-2010	0.3%	8.0%	27.8%	43.2%	47.1%	52.4%	52.6%	55.7%	56.7%	57.4%	56.4%	61.8%	60.4%	64.5%	65.6%
Warren County	Adjusted 2010	0.0%	11.0%	31.6%	43.8%	52.8%	53.3%	60.4%	64.8%	55.0%	65.0%	51.9%	61.7%	57.4%	70.8%	63.4%
NJ	Min 1990-2010	0.6%	11.8%	32.0%	44.5%	49.9%	52.5%	54.6%	56.0%	57.5%	58.3%	58.5%	61.6%	62.0%	69.5%	67.3%
Fairfield County	Adjusted 2010	0.6%	11.1%	36.0%	47.3%	46.4%	52.8%	55.3%	58.9%	55.8%	56.9%	64.8%	59.7%	60.7%	72.3%	75.6%
Litchfield County	Adjusted 2000	1.0%	17.9%	38.6%	48.3%	51.8%	53.9%	56.8%	58.0%	59.4%	60.5%	63.6%	62.1%	68.3%	72.3%	73.2%
New Haven County	Adjusted 2010	0.4%	20.3%	39.2%	55.3%	53.6%	55.0%	57.2%	59.9%	56.5%	59.7%	60.1%	64.5%	64.6%	70.6%	67.9%
CT	Adjusted 2010	0.5%	15.7%	37.5%	50.9%	49.5%	53.8%	56.2%	59.4%	56.2%	58.3%	62.9%	61.9%	62.5%	71.7%	72.0%

TABLE 5-6. 26-COUNTY HOUSEHOLD FORECASTS

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Nassau County	448,528	450,931	456,377	468,167	482,441	497,008	511,886	526,159	541,829
Suffolk County	499,922	508,487	523,081	541,585	560,510	575,637	588,168	599,739	612,077
Long Island Total	948,450	959,418	979,458	1,009,752	1,042,951	1,072,645	1,100,054	1,125,899	1,153,906
Dutchess County	107,965	112,123	115,718	119,803	124,013	127,310	129,717	131,899	134,452
Orange County	125,925	132,783	139,421	147,611	156,776	165,946	174,450	182,701	191,614
Putnam County	35,041	36,186	37,257	38,230	39,111	39,812	40,289	40,683	41,080
Rockland County	99,242	103,959	105,776	108,892	113,270	117,718	121,925	126,023	130,892
Sullivan County	30,139	31,069	31,763	32,515	34,045	35,298	36,231	37,192	38,313
Ulster County	71,049	74,098	76,691	79,081	81,184	82,522	83,096	83,455	83,804
Westchester County	347,232	356,766	362,624	372,891	386,163	399,395	411,423	423,896	438,277
Mid-Hudson Total	816,593	846,984	869,250	899,022	934,562	968,001	997,131	1,025,849	1,058,434
Bergen County	335,730	339,860	346,982	356,064	364,940	372,493	375,917	380,925	389,078
Essex County	283,712	289,757	297,143	306,636	317,134	326,688	335,761	344,629	355,508
Hudson County	246,437	259,460	267,536	277,029	289,731	303,485	317,032	331,067	344,953
Hunterdon County	47,169	48,489	49,824	51,016	51,821	52,362	52,722	52,989	53,142
Mercer County	133,155	133,401	138,260	144,254	150,619	157,188	163,141	169,241	176,177
Middlesex County	281,186	284,658	293,238	302,001	312,684	323,181	333,200	340,819	350,407
Monmouth County	233,983	238,584	245,710	251,386	256,009	260,096	262,238	265,293	267,928
Morris County	180,534	186,604	193,466	197,862	201,578	202,821	203,040	204,076	205,043
Ocean County	221,111	225,056	232,550	243,084	254,431	272,266	282,784	293,124	303,300
Passaic County	166,785	170,877	175,941	181,445	187,674	193,112	201,022	209,472	218,186
Somerset County	117,759	118,200	122,203	126,293	129,499	132,228	134,632	136,926	140,474
Sussex County	54,752	56,688	58,583	59,351	59,830	60,722	61,624	62,252	62,648
Union County	188,118	189,424	193,719	199,433	206,126	213,256	220,062	226,636	233,939
Warren County	41,480	42,989	44,423	45,655	46,875	47,641	48,541	49,020	49,300
New Jersey Total	2,531,911	2,584,045	2,659,576	2,741,507	2,828,953	2,917,542	2,991,717	3,066,468	3,150,082
Fairfield County	335,545	348,204	355,711	366,097	378,542	389,979	400,214	411,265	423,423
Litchfield County	76,640	80,885	83,337	85,520	87,181	88,458	88,741	89,088	89,367
New Haven County	334,502	347,947	362,848	378,627	394,742	407,668	418,210	428,211	439,601
Connecticut Total	746,687	777,037	801,895	830,244	860,465	886,105	907,165	928,564	952,391

APPENDIX A: FERTILITY RATES

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
31 County Region	10 - 14	1.1	0.3	0.2	0.2	0.1	0.1	0.0	0.0	-	-
31 County Region	15 - 19	44.8	21.3	20.4	19.0	17.8	16.7	15.8	15.0	14.3	13.6
31 County Region	20 - 24	93.7	69.8	69.2	68.2	67.4	66.7	66.1	65.6	65.1	64.7
31 County Region	25 - 29	115.6	90.8	89.9	88.5	87.3	86.3	85.4	84.6	83.9	83.3
31 County Region	30 - 34	99.6	110.7	111.4	112.5	113.5	114.3	115.0	115.7	116.3	116.8
31 County Region	35 - 39	43.6	65.1	66.2	67.9	69.3	70.5	71.6	72.5	73.4	74.1
31 County Region	40 - 44	7.8	15.7	16.1	16.7	17.2	17.6	18.0	18.3	18.6	18.9
31 County Region	45 - 49	0.4	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.6
31 County Region	TFR	2,032.8	1,875.0	1,873.9	1,871.9	1,870.3	1,868.8	1,867.7	1,866.6	1,865.8	1,865.0
New York City	10 - 14	1.7	-	-	-	-	-	-	-	-	-
New York City	15 - 19	62.0	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9
New York City	20 - 24	113.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
New York City	25 - 29	110.5	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
New York City	30 - 34	90.0	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
New York City	35 - 39	44.9	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
New York City	40 - 44	9.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
New York City	45 - 49	0.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
New York City	TFR	2,165.3	1,848.8	1,848.8	1,848.8	1,848.8	1,848.8	1,848.8	1,848.8	1,848.8	1,848.8
Bronx County	10 - 14	2.4	-	-	-	-	-	-	-	-	-
Bronx County	15 - 19	87.0	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
Bronx County	20 - 24	153.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Bronx County	25 - 29	132.5	114.8	114.8	114.8	114.8	114.8	114.8	114.8	114.8	114.8
Bronx County	30 - 34	93.3	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
Bronx County	35 - 39	41.8	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
Bronx County	40 - 44	8.7	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
Bronx County	45 - 49	0.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Bronx County	TFR	2,595.5	2,150.6	2,150.6	2,150.6	2,150.6	2,150.6	2,150.6	2,150.6	2,150.6	2,150.6
Kings County	10 - 14	1.7	-	-	-	-	-	-	-	-	-
Kings County	15 - 19	65.0	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
Kings County	20 - 24	129.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
Kings County	25 - 29	121.7	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
Kings County	30 - 34	95.5	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
Kings County	35 - 39	49.0	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
Kings County	40 - 44	11.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
Kings County	45 - 49	0.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Kings County	TFR	2,371.1	2,036.2	2,036.2	2,036.2	2,036.2	2,036.2	2,036.2	2,036.2	2,036.2	2,036.2
New York County	10 - 14	2.5	-	-	-	-	-	-	-	-	-
New York County	15 - 19	75.9	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
New York County	20 - 24	83.1	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
New York County	25 - 29	70.0	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
New York County	30 - 34	72.7	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
New York County	35 - 39	44.4	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
New York County	40 - 44	10.6	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
New York County	45 - 49	0.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
New York County	TFR	1,798.2	1,479.1	1,479.1	1,479.1	1,479.1	1,479.1	1,479.1	1,479.1	1,479.1	1,479.1
Queens County	10 - 14	0.9	-	-	-	-	-	-	-	-	-
Queens County	15 - 19	39.8	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Queens County	20 - 24	96.3	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
Queens County	25 - 29	115.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
Queens County	30 - 34	92.7	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
Queens County	35 - 39	42.7	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
Queens County	40 - 44	8.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
Queens County	45 - 49	0.4	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Queens County	TFR	1,983.3	1,799.1	1,799.1	1,799.1	1,799.1	1,799.1	1,799.1	1,799.1	1,799.1	1,799.1
Richmond County	10 - 14	0.5	-	-	-	-	-	-	-	-	-
Richmond County	15 - 19	26.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
Richmond County	20 - 24	80.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
Richmond County	25 - 29	134.6	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8
Richmond County	30 - 34	113.2	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1
Richmond County	35 - 39	41.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
Richmond County	40 - 44	5.6	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Richmond County	45 - 49	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Richmond County	TFR	2,014.7	1,868.2	1,868.2	1,868.2	1,868.2	1,868.2	1,868.2	1,868.2	1,868.2	1,868.2
Long Island	10 - 14	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Long Island	15 - 19	20.7	13.3	13.0	12.6	12.2	11.9	11.7	11.4	11.2	11.0
Long Island	20 - 24	65.7	52.7	52.5	52.1	51.9	51.6	51.4	51.2	51.0	50.9
Long Island	25 - 29	129.9	99.5	98.5	96.9	95.5	94.3	93.3	92.4	91.6	90.8
Long Island	30 - 34	118.7	133.2	134.2	135.8	137.1	138.2	139.2	140.1	140.9	141.6
Long Island	35 - 39	42.9	69.8	71.1	73.2	75.0	76.6	77.9	79.1	80.2	81.2
Long Island	40 - 44	5.7	14.4	14.8	15.5	16.0	16.5	17.0	17.4	17.7	18.0
Long Island	45 - 49	0.1	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4
Long Island	TFR	1,920.9	1,919.7	1,926.0	1,936.5	1,945.2	1,952.8	1,959.3	1,965.2	1,970.5	1,975.3
Nassau County	10 - 14	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nassau County	15 - 19	17.4	10.3	10.0	9.6	9.3	9.0	8.8	8.5	8.3	8.1
Nassau County	20 - 24	55.1	43.8	43.6	43.3	43.0	42.7	42.5	42.3	42.2	42.0
Nassau County	25 - 29	121.2	91.1	90.1	88.5	87.2	86.0	85.0	84.0	83.2	82.5
Nassau County	30 - 34	123.3	139.9	141.0	142.7	144.2	145.5	146.6	147.6	148.5	149.4
Nassau County	35 - 39	45.9	74.8	76.1	78.3	80.2	81.8	83.2	84.4	85.5	86.6
Nassau County	40 - 44	6.7	16.0	16.4	17.2	17.8	18.3	18.8	19.2	19.6	20.0
Nassau County	45 - 49	0.1	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.6
Nassau County	TFR	1,849.9	1,885.6	1,893.0	1,905.3	1,915.6	1,924.4	1,932.1	1,939.0	1,945.2	1,950.8
Suffolk County	10 - 14	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Suffolk County	15 - 19	23.6	15.9	15.7	15.2	14.9	14.5	14.3	14.0	13.8	13.6
Suffolk County	20 - 24	75.6	60.6	60.4	60.0	59.7	59.5	59.3	59.1	58.9	58.7
Suffolk County	25 - 29	137.6	106.9	105.9	104.3	102.9	101.7	100.7	99.7	98.9	98.2
Suffolk County	30 - 34	114.5	127.5	128.4	129.8	131.0	132.1	133.0	133.8	134.5	135.2
Suffolk County	35 - 39	39.9	65.5	66.8	68.9	70.7	72.2	73.6	74.8	75.8	76.8
Suffolk County	40 - 44	4.8	13.0	13.4	14.0	14.6	15.0	15.4	15.8	16.1	16.4
Suffolk County	45 - 49	0.2	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2
Suffolk County	TFR	1,983.1	1,952.5	1,958.0	1,967.2	1,974.8	1,981.4	1,987.1	1,992.3	1,996.9	2,001.1
Mid-Hudson	10 - 14	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Mid-Hudson	15 - 19	30.7	17.6	17.2	16.4	15.7	15.1	14.6	14.2	13.8	13.4
Mid-Hudson	20 - 24	83.8	78.3	78.6	79.0	79.3	79.6	79.9	80.1	80.3	80.5
Mid-Hudson	25 - 29	119.2	108.4	108.4	108.3	108.2	108.2	108.1	108.0	108.0	108.0
Mid-Hudson	30 - 34	102.6	126.0	127.4	129.7	131.6	133.2	134.6	135.9	137.1	138.1
Mid-Hudson	35 - 39	45.7	70.5	71.8	73.9	75.6	77.1	78.4	79.6	80.7	81.6
Mid-Hudson	40 - 44	8.6	15.9	16.3	16.9	17.4	17.8	18.2	18.6	18.9	19.2

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Mid-Hudson	45 - 49	0.3	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6
Mid-Hudson	TFR	1,956.2	2,091.2	2,105.0	2,127.9	2,146.9	2,163.3	2,177.6	2,190.5	2,201.9	2,212.4
Dutchess County	10 - 14	0.4	0.1	0.1	0.0	0.0	0.0	-	-	-	-
Dutchess County	15 - 19	28.9	17.7	17.1	16.1	15.2	14.5	13.9	13.3	12.8	12.4
Dutchess County	20 - 24	95.7	58.8	58.1	56.8	55.8	54.9	54.1	53.4	52.8	52.2
Dutchess County	25 - 29	123.0	102.2	101.8	101.2	100.6	100.2	99.7	99.4	99.1	98.7
Dutchess County	30 - 34	91.9	115.7	117.1	119.3	121.1	122.7	124.1	125.3	126.4	127.4
Dutchess County	35 - 39	32.2	55.4	56.5	58.2	59.7	61.0	62.1	63.1	64.0	64.8
Dutchess County	40 - 44	5.0	12.0	12.4	12.9	13.4	13.8	14.2	14.5	14.8	15.0
Dutchess County	45 - 49	0.3	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
Dutchess County	TFR	1,887.1	1,812.8	1,817.7	1,825.8	1,832.6	1,838.5	1,843.7	1,848.4	1,852.5	1,856.4
Orange County	10 - 14	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Orange County	15 - 19	42.3	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
Orange County	20 - 24	118.5	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6
Orange County	25 - 29	143.5	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1
Orange County	30 - 34	92.9	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6
Orange County	35 - 39	38.9	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
Orange County	40 - 44	7.2	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
Orange County	45 - 49	0.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Orange County	TFR	2,218.7	2,331.2	2,331.2	2,331.2	2,331.2	2,331.2	2,331.2	2,331.2	2,331.2	2,331.2
Putnam County	10 - 14	-	-	-	-	-	-	-	-	-	-
Putnam County	15 - 19	9.0	5.0	4.8	4.5	4.3	4.1	4.0	3.8	3.7	3.6
Putnam County	20 - 24	43.7	41.7	41.5	41.2	40.9	40.6	40.4	40.2	40.0	39.9
Putnam County	25 - 29	121.3	96.4	95.6	94.2	93.1	92.1	91.2	90.4	89.7	89.1
Putnam County	30 - 34	112.5	139.7	141.3	144.1	146.4	148.4	150.1	151.6	153.0	154.3
Putnam County	35 - 39	49.5	75.6	77.3	80.1	82.4	84.4	86.1	87.7	89.1	90.4
Putnam County	40 - 44	7.2	15.1	15.5	16.2	16.8	17.3	17.7	18.1	18.4	18.7
Putnam County	45 - 49	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0
Putnam County	TFR	1,718.9	1,871.7	1,884.5	1,905.9	1,923.6	1,938.9	1,952.2	1,964.2	1,974.9	1,984.7
Rockland County	10 - 14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Rockland County	15 - 19	18.7	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
Rockland County	20 - 24	71.7	114.1	114.1	114.1	114.1	114.1	114.1	114.1	114.1	114.1
Rockland County	25 - 29	115.7	138.8	138.8	138.8	138.8	138.8	138.8	138.8	138.8	138.8
Rockland County	30 - 34	114.5	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2
Rockland County	35 - 39	47.9	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
Rockland County	40 - 44	11.5	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
Rockland County	45 - 49	0.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Rockland County	TFR	1,903.5	2,594.3	2,594.3	2,594.3	2,594.3	2,594.3	2,594.3	2,594.3	2,594.3	2,594.3
Sullivan County	10 - 14	0.5	-	-	-	-	-	-	-	-	-
Sullivan County	15 - 19	54.8	27.6	27.1	26.1	25.4	24.7	24.2	23.6	23.2	22.8
Sullivan County	20 - 24	159.0	103.3	102.4	100.9	99.7	98.6	97.6	96.8	96.0	95.3
Sullivan County	25 - 29	142.1	126.7	126.8	127.0	127.2	127.3	127.4	127.5	127.6	127.7
Sullivan County	30 - 34	88.1	107.5	108.2	109.5	110.5	111.4	112.1	112.8	113.4	114.0
Sullivan County	35 - 39	30.8	30.8	31.1	31.6	32.1	32.4	32.7	33.0	33.3	33.5
Sullivan County	40 - 44	7.3	7.7	7.9	8.0	8.2	8.3	8.4	8.5	8.6	8.7
Sullivan County	45 - 49	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Sullivan County	TFR	2,413.1	2,020.4	2,019.4	2,017.8	2,016.4	2,015.2	2,014.2	2,013.3	2,012.5	2,011.7
Ulster County	10 - 14	0.2	-	-	-	-	-	-	-	-	-
Ulster County	15 - 19	42.9	20.4	19.7	18.5	17.5	16.6	15.8	15.1	14.5	14.0
Ulster County	20 - 24	98.2	63.6	62.8	61.4	60.2	59.1	58.2	57.4	56.7	56.1

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Ulster County	25 - 29	132.5	102.4	101.3	99.4	97.8	96.4	95.2	94.2	93.2	92.3
Ulster County	30 - 34	90.5	94.9	95.3	95.9	96.4	96.9	97.3	97.7	98.0	98.3
Ulster County	35 - 39	38.1	53.2	53.8	55.0	55.9	56.7	57.3	58.0	58.5	59.0
Ulster County	40 - 44	7.4	11.0	11.2	11.5	11.7	11.9	12.1	12.2	12.4	12.5
Ulster County	45 - 49	0.2	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.8	1.8
Ulster County	TFR	2,050.1	1,735.3	1,727.9	1,715.5	1,705.2	1,696.3	1,688.6	1,681.7	1,675.5	1,669.8
Westchester County	10 - 14	0.6	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0
Westchester County	15 - 19	29.3	16.6	16.2	15.4	14.8	14.2	13.7	13.3	12.9	12.6
Westchester County	20 - 24	69.9	63.3	63.5	63.8	64.0	64.2	64.4	64.6	64.7	64.9
Westchester County	25 - 29	106.5	91.3	91.0	90.4	89.9	89.5	89.2	88.9	88.6	88.3
Westchester County	30 - 34	108.1	127.8	128.9	130.8	132.4	133.7	134.9	135.9	136.8	137.7
Westchester County	35 - 39	53.4	79.5	80.8	83.0	84.8	86.3	87.7	88.9	90.0	91.0
Westchester County	40 - 44	9.6	18.4	18.8	19.6	20.2	20.7	21.2	21.6	22.0	22.4
Westchester County	45 - 49	0.2	1.4	1.4	1.5	1.6	1.7	1.7	1.8	1.9	1.9
Westchester County	TFR	1,888.5	1,993.5	2,004.9	2,023.7	2,039.4	2,053.0	2,064.7	2,075.3	2,084.7	2,093.4
New Jersey	10 - 14	0.9	0.2	0.2	0.1	0.1	0.1	0.0	0.0	-	-
New Jersey	15 - 19	39.6	18.4	17.7	16.5	15.5	14.7	13.9	13.3	12.7	12.1
New Jersey	20 - 24	84.4	67.5	67.2	66.6	66.2	65.8	65.5	65.2	64.9	64.7
New Jersey	25 - 29	116.6	97.7	97.2	96.4	95.7	95.1	94.5	94.0	93.6	93.2
New Jersey	30 - 34	102.6	119.8	120.9	122.7	124.2	125.5	126.7	127.7	128.6	129.4
New Jersey	35 - 39	42.0	64.4	65.5	67.3	68.8	70.1	71.3	72.3	73.2	74.1
New Jersey	40 - 44	6.7	14.1	14.4	15.0	15.5	15.9	16.2	16.5	16.8	17.1
New Jersey	45 - 49	0.6	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1
New Jersey	TFR	1,966.8	1,915.0	1,920.0	1,928.2	1,935.0	1,940.9	1,946.1	1,950.8	1,955.1	1,959.0
Bergen County	10 - 14	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Bergen County	15 - 19	9.3	6.1	6.0	5.9	5.7	5.6	5.5	5.4	5.4	5.3
Bergen County	20 - 24	46.7	36.9	36.8	36.6	36.4	36.3	36.2	36.1	36.0	35.9
Bergen County	25 - 29	102.6	83.5	82.9	81.8	80.9	80.1	79.5	78.9	78.3	77.8
Bergen County	30 - 34	107.0	127.0	128.1	130.0	131.5	132.9	134.0	135.1	136.0	136.9
Bergen County	35 - 39	46.6	69.1	70.2	72.0	73.4	74.7	75.9	76.9	77.8	78.6
Bergen County	40 - 44	6.6	15.0	15.3	16.0	16.5	16.9	17.3	17.7	18.0	18.3
Bergen County	45 - 49	0.4	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3
Bergen County	TFR	1,595.7	1,692.8	1,701.6	1,716.3	1,728.5	1,739.0	1,748.1	1,756.4	1,763.7	1,770.5
Essex County	10 - 14	2.3	0.3	0.3	0.2	0.1	0.0	-	-	-	-
Essex County	15 - 19	75.8	30.8	29.4	27.0	25.0	23.3	21.8	20.5	19.3	18.2
Essex County	20 - 24	117.9	82.2	81.3	79.8	78.6	77.5	76.5	75.7	74.9	74.2
Essex County	25 - 29	116.1	94.2	93.6	92.5	91.7	91.0	90.3	89.8	89.3	88.8
Essex County	30 - 34	93.9	100.5	101.3	102.7	103.8	104.8	105.7	106.4	107.1	107.7
Essex County	35 - 39	40.7	60.3	61.4	63.1	64.5	65.7	66.8	67.8	68.6	69.4
Essex County	40 - 44	7.3	15.3	15.7	16.3	16.8	17.3	17.7	18.0	18.3	18.6
Essex County	45 - 49	0.9	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4
Essex County	TFR	2,274.2	1,924.4	1,920.6	1,914.2	1,909.0	1,904.6	1,900.9	1,897.6	1,894.7	1,892.0
Hudson County	10 - 14	1.8	0.5	0.4	0.3	0.2	0.1	0.0	0.0	-	-
Hudson County	15 - 19	61.2	32.3	31.2	29.3	27.7	26.4	25.2	24.1	23.2	22.3
Hudson County	20 - 24	105.2	69.5	68.2	66.1	64.3	62.8	61.4	60.2	59.2	58.2
Hudson County	25 - 29	108.2	77.2	76.0	73.9	72.2	70.7	69.4	68.2	67.2	66.2
Hudson County	30 - 34	85.4	105.6	106.4	107.7	108.8	109.8	110.6	111.3	112.0	112.6
Hudson County	35 - 39	38.7	67.6	68.8	70.8	72.4	73.9	75.1	76.2	77.2	78.1
Hudson County	40 - 44	9.3	16.1	16.4	17.0	17.4	17.8	18.2	18.5	18.8	19.0
Hudson County	45 - 49	0.8	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Hudson County	TFR	2,053.5	1,850.6	1,843.7	1,832.1	1,822.5	1,814.3	1,807.2	1,800.9	1,795.4	1,790.4
Hunterdon County	10 - 14	-	-	-	-	-	-	-	-	-	-
Hunterdon County	15 - 19	10.0	-	-	-	-	-	-	-	-	-
Hunterdon County	20 - 24	50.6	27.9	27.6	27.0	26.5	26.0	25.7	25.3	25.0	24.8
Hunterdon County	25 - 29	119.1	88.5	87.6	86.0	84.7	83.5	82.6	81.7	80.9	80.2
Hunterdon County	30 - 34	111.4	138.0	139.7	142.4	144.7	146.6	148.3	149.9	151.2	152.5
Hunterdon County	35 - 39	46.0	67.9	69.1	71.0	72.7	74.1	75.3	76.4	77.4	78.3
Hunterdon County	40 - 44	6.6	14.6	15.0	15.7	16.3	16.8	17.2	17.6	17.9	18.3
Hunterdon County	45 - 49	-	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.2
Hunterdon County	TFR	1,718.6	1,692.7	1,702.7	1,719.3	1,733.1	1,745.0	1,755.4	1,764.7	1,773.0	1,780.6
Mercer County	10 - 14	2.4	0.6	0.5	0.3	0.2	0.1	0.0	0.0	-	-
Mercer County	15 - 19	57.9	27.6	26.4	24.5	22.8	21.4	20.2	19.1	18.1	17.2
Mercer County	20 - 24	90.1	73.6	73.1	72.4	71.7	71.2	70.7	70.3	69.9	69.6
Mercer County	25 - 29	111.3	99.9	99.7	99.3	99.0	98.8	98.5	98.3	98.2	98.0
Mercer County	30 - 34	99.3	114.1	115.1	116.6	117.8	118.9	119.9	120.7	121.5	122.2
Mercer County	35 - 39	39.0	57.1	58.0	59.4	60.6	61.7	62.6	63.4	64.1	64.8
Mercer County	40 - 44	6.1	14.5	14.8	15.3	15.8	16.2	16.5	16.8	17.1	17.3
Mercer County	45 - 49	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Mercer County	TFR	2,035.5	1,939.0	1,939.8	1,941.1	1,942.1	1,943.0	1,944.0	1,945.0	1,946.0	1,947.0
Middlesex County	10 - 14	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Middlesex County	15 - 19	28.4	14.5	14.2	13.5	13.0	12.6	12.2	11.9	11.5	11.3
Middlesex County	20 - 24	67.1	55.3	55.3	55.2	55.1	55.0	54.9	54.9	54.8	54.8
Middlesex County	25 - 29	111.5	109.2	109.3	109.3	109.3	109.4	109.4	109.4	109.4	109.4
Middlesex County	30 - 34	99.9	118.3	119.4	121.3	122.9	124.3	125.4	126.5	127.4	128.3
Middlesex County	35 - 39	40.9	55.9	56.6	57.9	58.9	59.8	60.5	61.2	61.8	62.4
Middlesex County	40 - 44	4.8	11.3	11.6	12.0	12.4	12.7	13.0	13.2	13.4	13.6
Middlesex County	45 - 49	0.4	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1
Middlesex County	TFR	1,766.8	1,828.9	1,837.6	1,852.0	1,863.9	1,874.3	1,883.2	1,891.3	1,898.5	1,905.1
Monmouth County	10 - 14	0.7	0.0	0.0	0.0	-	-	-	-	-	-
Monmouth County	15 - 19	30.3	11.4	10.9	9.9	9.1	8.5	7.9	7.3	6.9	6.4
Monmouth County	20 - 24	73.8	51.5	50.9	50.1	49.3	48.7	48.2	47.7	47.2	46.8
Monmouth County	25 - 29	123.4	90.6	89.9	88.8	87.8	86.9	86.2	85.5	85.0	84.4
Monmouth County	30 - 34	111.8	135.0	136.5	138.9	140.9	142.6	144.1	145.5	146.7	147.8
Monmouth County	35 - 39	42.0	64.5	65.7	67.7	69.4	70.8	72.1	73.2	74.2	75.1
Monmouth County	40 - 44	6.5	12.8	13.1	13.7	14.1	14.5	14.8	15.1	15.3	15.6
Monmouth County	45 - 49	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Monmouth County	TFR	1,944.8	1,833.0	1,838.8	1,848.5	1,856.6	1,863.7	1,869.8	1,875.3	1,880.2	1,884.7
Morris County	10 - 14	-	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Morris County	15 - 19	11.5	6.1	5.9	5.6	5.4	5.1	5.0	4.8	4.7	4.5
Morris County	20 - 24	49.7	34.1	33.9	33.5	33.1	32.8	32.6	32.3	32.1	31.9
Morris County	25 - 29	112.7	82.5	81.6	80.0	78.7	77.6	76.7	75.8	75.0	74.3
Morris County	30 - 34	115.5	139.9	141.4	143.9	146.0	147.8	149.3	150.7	151.9	153.1
Morris County	35 - 39	45.7	74.2	75.8	78.3	80.4	82.3	83.9	85.3	86.6	87.7
Morris County	40 - 44	6.6	14.5	14.9	15.6	16.2	16.7	17.1	17.5	17.8	18.1
Morris County	45 - 49	0.2	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6
Morris County	TFR	1,710.0	1,763.2	1,773.8	1,791.4	1,806.0	1,818.6	1,829.6	1,839.5	1,848.3	1,856.4
Ocean County	10 - 14	0.2	-	-	-	-	-	-	-	-	-
Ocean County	15 - 19	28.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
Ocean County	20 - 24	112.0	128.6	128.6	128.6	128.6	128.6	128.6	128.6	128.6	128.6
Ocean County	25 - 29	147.3	151.6	151.6	151.6	151.6	151.6	151.6	151.6	151.6	151.6

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Ocean County	30 - 34	102.8	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4
Ocean County	35 - 39	34.7	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
Ocean County	40 - 44	6.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
Ocean County	45 - 49	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Ocean County	TFR	2,160.3	2,604.7	2,604.7	2,604.7	2,604.7	2,604.7	2,604.7	2,604.7	2,604.7	2,604.7
Passaic County	10 - 14	1.6	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1
Passaic County	15 - 19	65.1	36.0	35.0	33.4	32.0	30.9	29.8	28.9	28.1	27.3
Passaic County	20 - 24	116.5	95.4	94.8	93.8	92.9	92.2	91.6	91.0	90.5	90.0
Passaic County	25 - 29	129.0	110.2	109.8	109.2	108.7	108.2	107.8	107.4	107.1	106.8
Passaic County	30 - 34	102.5	109.7	110.5	111.9	113.1	114.1	114.9	115.7	116.4	117.0
Passaic County	35 - 39	42.2	63.1	64.2	65.9	67.4	68.6	69.7	70.7	71.5	72.3
Passaic County	40 - 44	7.0	12.1	12.4	12.9	13.3	13.6	14.0	14.2	14.5	14.7
Passaic County	45 - 49	0.7	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1
Passaic County	TFR	2,322.2	2,141.0	2,141.7	2,142.8	2,143.8	2,144.6	2,145.3	2,146.0	2,146.5	2,147.1
Somerset County	10 - 14	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Somerset County	15 - 19	15.7	10.3	10.1	9.8	9.6	9.4	9.2	9.1	9.0	8.8
Somerset County	20 - 24	54.6	48.9	49.0	49.3	49.5	49.6	49.8	49.9	50.0	50.1
Somerset County	25 - 29	120.3	94.6	94.2	93.4	92.7	92.2	91.7	91.3	90.9	90.5
Somerset County	30 - 34	121.3	132.5	133.5	135.1	136.5	137.6	138.7	139.6	140.4	141.1
Somerset County	35 - 39	49.2	68.4	69.4	71.2	72.6	73.8	74.9	75.9	76.7	77.5
Somerset County	40 - 44	8.5	13.9	14.2	14.7	15.2	15.6	15.9	16.2	16.5	16.7
Somerset County	45 - 49	0.4	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.2
Somerset County	TFR	1,851.3	1,848.0	1,857.4	1,873.1	1,886.1	1,897.3	1,907.1	1,915.9	1,923.7	1,930.9
Sussex County	10 - 14	0.4	-	-	-	-	-	-	-	-	-
Sussex County	15 - 19	18.1	8.4	7.7	6.6	5.6	4.7	4.0	3.3	2.7	2.2
Sussex County	20 - 24	76.7	39.8	38.8	37.2	35.8	34.7	33.6	32.7	31.9	31.2
Sussex County	25 - 29	142.5	101.7	100.8	99.4	98.2	97.1	96.2	95.4	94.7	94.1
Sussex County	30 - 34	106.6	137.5	138.8	141.1	143.0	144.6	146.0	147.3	148.4	149.4
Sussex County	35 - 39	37.7	59.9	61.0	62.9	64.5	65.9	67.1	68.1	69.1	70.0
Sussex County	40 - 44	5.2	12.1	12.4	12.8	13.2	13.6	13.9	14.2	14.4	14.6
Sussex County	45 - 49	-	-	-	-	-	-	-	-	-	-
Sussex County	TFR	1,936.5	1,796.9	1,798.1	1,800.0	1,801.6	1,803.0	1,804.2	1,805.2	1,806.2	1,807.1
Union County	10 - 14	0.9	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Union County	15 - 19	42.7	23.5	22.9	21.7	20.8	20.0	19.3	18.7	18.2	17.7
Union County	20 - 24	83.8	74.5	74.5	74.6	74.7	74.8	74.9	75.0	75.0	75.1
Union County	25 - 29	111.9	101.6	101.5	101.2	101.0	100.8	100.7	100.5	100.4	100.3
Union County	30 - 34	102.3	119.1	120.2	122.1	123.6	125.0	126.1	127.2	128.1	129.0
Union County	35 - 39	43.9	66.6	67.7	69.5	71.1	72.4	73.6	74.6	75.5	76.4
Union County	40 - 44	7.0	15.2	15.6	16.2	16.7	17.1	17.5	17.9	18.2	18.4
Union County	45 - 49	0.5	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2
Union County	TFR	1,965.1	2,009.6	2,018.8	2,034.0	2,046.7	2,057.6	2,067.1	2,075.7	2,083.3	2,090.3
Warren County	10 - 14	0.3	-	-	-	-	-	-	-	-	-
Warren County	15 - 19	34.0	8.4	7.8	6.7	5.9	5.2	4.5	4.0	3.5	3.0
Warren County	20 - 24	102.3	47.5	46.6	45.0	43.8	42.7	41.8	40.9	40.2	39.5
Warren County	25 - 29	135.7	105.3	104.9	104.1	103.4	102.9	102.4	101.9	101.5	101.2
Warren County	30 - 34	92.0	110.5	111.6	113.6	115.2	116.6	117.8	118.9	119.8	120.7
Warren County	35 - 39	32.8	53.3	54.3	56.1	57.6	58.9	60.0	61.0	61.9	62.7
Warren County	40 - 44	3.7	11.0	11.3	11.8	12.3	12.6	12.9	13.2	13.5	13.7
Warren County	45 - 49	0.7	-	-	-	-	-	-	-	-	-
Warren County	TFR	2,007.6	1,679.8	1,682.5	1,687.1	1,690.8	1,694.1	1,696.9	1,699.5	1,701.8	1,703.9

Area Name- Description	Age Group	Age-Specific Fertility Rate									
		Historical		Forecast Assumptions							
		1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Connecticut	10 - 14	1.0	0.1	0.1	0.1	0.0	0.0	-	-	-	-
Connecticut	15 - 19	42.8	19.5	18.8	17.5	16.5	15.5	14.7	14.0	13.4	12.8
Connecticut	20 - 24	85.2	62.6	62.3	61.8	61.4	61.1	60.8	60.6	60.4	60.1
Connecticut	25 - 29	113.0	88.2	87.7	86.7	85.9	85.2	84.6	84.1	83.6	83.1
Connecticut	30 - 34	101.7	115.4	116.2	117.6	118.7	119.6	120.5	121.3	121.9	122.6
Connecticut	35 - 39	42.4	62.3	63.3	65.0	66.5	67.7	68.8	69.8	70.7	71.5
Connecticut	40 - 44	6.1	13.3	13.7	14.2	14.7	15.1	15.4	15.7	16.0	16.3
Connecticut	45 - 49	0.2	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6
Connecticut	TFR	1,962.0	1,812.7	1,815.7	1,820.8	1,825.0	1,828.7	1,831.9	1,834.8	1,837.5	1,839.9
Fairfield County	10 - 14	0.9	0.1	0.0	0.0	0.0	0.0	-	-	-	-
Fairfield County	15 - 19	39.1	16.6	15.8	14.6	13.6	12.7	11.9	11.2	10.6	10.0
Fairfield County	20 - 24	79.2	58.9	58.7	58.5	58.3	58.1	58.0	57.8	57.7	57.6
Fairfield County	25 - 29	109.9	88.4	87.9	87.2	86.6	86.1	85.6	85.2	84.9	84.6
Fairfield County	30 - 34	113.7	128.7	129.5	131.0	132.2	133.2	134.1	134.9	135.6	136.2
Fairfield County	35 - 39	51.8	76.4	77.7	79.9	81.7	83.2	84.6	85.8	86.8	87.8
Fairfield County	40 - 44	7.3	15.8	16.2	16.8	17.4	17.9	18.3	18.7	19.0	19.3
Fairfield County	45 - 49	0.2	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.1	2.2
Fairfield County	TFR	2,011.0	1,931.8	1,938.2	1,948.8	1,957.7	1,965.4	1,972.1	1,978.1	1,983.5	1,988.5
Litchfield County	10 - 14	-	-	-	-	-	-	-	-	-	-
Litchfield County	15 - 19	23.5	11.4	10.8	10.0	9.3	8.6	8.1	7.6	7.2	6.8
Litchfield County	20 - 24	79.5	55.5	54.9	54.0	53.2	52.6	52.0	51.5	51.0	50.6
Litchfield County	25 - 29	124.5	99.4	99.2	98.7	98.4	98.1	97.8	97.6	97.4	97.2
Litchfield County	30 - 34	97.9	115.7	116.8	118.6	120.2	121.5	122.6	123.7	124.6	125.4
Litchfield County	35 - 39	33.6	48.1	49.0	50.4	51.6	52.6	53.5	54.3	55.0	55.6
Litchfield County	40 - 44	5.3	10.3	10.6	11.0	11.3	11.5	11.8	12.0	12.2	12.3
Litchfield County	45 - 49	-	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Litchfield County	TFR	1,821.8	1,705.6	1,710.0	1,717.3	1,723.4	1,728.6	1,733.2	1,737.3	1,741.0	1,744.4
New Haven County	10 - 14	1.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	-	-
New Haven County	15 - 19	51.3	24.5	23.6	22.2	21.1	20.0	19.2	18.4	17.7	17.0
New Haven County	20 - 24	92.3	66.9	66.6	65.9	65.4	65.0	64.6	64.2	63.9	63.6
New Haven County	25 - 29	113.9	86.4	85.7	84.5	83.4	82.5	81.8	81.1	80.5	79.9
New Haven County	30 - 34	90.7	101.8	102.5	103.6	104.6	105.4	106.1	106.7	107.3	107.8
New Haven County	35 - 39	34.7	49.1	49.9	51.2	52.3	53.2	54.0	54.7	55.3	55.9
New Haven County	40 - 44	4.9	11.2	11.4	11.9	12.3	12.6	12.9	13.2	13.4	13.6
New Haven County	45 - 49	0.1	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0
New Haven County	TFR	1,945.9	1,704.2	1,703.1	1,701.2	1,699.7	1,698.3	1,697.2	1,696.2	1,695.3	1,694.5

APPENDIX B: SURVIVAL RATES

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Forecast Region	MALE	Births	0.9899	0.9954	0.9956	0.9959	0.9962	0.9964	0.9967	0.9970	0.9973	0.9976
Forecast Region		0 - 4	0.9974	0.9989	0.9989	0.9990	0.9991	0.9991	0.9992	0.9992	0.9993	0.9994
Forecast Region		5 - 9	0.9989	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997
Forecast Region		10 - 14	0.9964	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9988	0.9988
Forecast Region		15 - 19	0.9929	0.9961	0.9962	0.9964	0.9965	0.9966	0.9968	0.9969	0.9970	0.9972
Forecast Region		20 - 24	0.9905	0.9950	0.9951	0.9953	0.9954	0.9956	0.9958	0.9960	0.9962	0.9964
Forecast Region		25 - 29	0.9871	0.9949	0.9951	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962	0.9964
Forecast Region		30 - 34	0.9815	0.9943	0.9944	0.9947	0.9949	0.9951	0.9953	0.9955	0.9957	0.9959
Forecast Region		35 - 39	0.9773	0.9920	0.9922	0.9925	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943
Forecast Region		40 - 44	0.9742	0.9871	0.9874	0.9879	0.9884	0.9889	0.9894	0.9899	0.9904	0.9909
Forecast Region		45 - 49	0.9670	0.9801	0.9806	0.9814	0.9822	0.9830	0.9837	0.9845	0.9853	0.9861
Forecast Region		50 - 54	0.9535	0.9698	0.9705	0.9716	0.9728	0.9740	0.9752	0.9763	0.9775	0.9787
Forecast Region		55 - 59	0.9304	0.9557	0.9567	0.9584	0.9601	0.9618	0.9635	0.9652	0.9669	0.9686
Forecast Region		60 - 64	0.8955	0.9364	0.9377	0.9399	0.9422	0.9444	0.9466	0.9489	0.9511	0.9533
Forecast Region		65 - 69	0.8465	0.9058	0.9076	0.9107	0.9138	0.9169	0.9200	0.9231	0.9262	0.9293
Forecast Region		70 - 74	0.7754	0.8558	0.8586	0.8632	0.8679	0.8725	0.8771	0.8818	0.8864	0.8910
Forecast Region		75 - 79	0.6786	0.7769	0.7811	0.7881	0.7951	0.8022	0.8092	0.8162	0.8233	0.8303
Forecast Region		80 - 84	0.5849	0.6809	0.6856	0.6935	0.7014	0.7092	0.7171	0.7250	0.7329	0.7408
Forecast Region		85 +	0.3615	0.4076	0.4125	0.4205	0.4286	0.4367	0.4448	0.4529	0.4609	0.4690
Forecast Region	FEMALE	Births	0.9917	0.9959	0.9960	0.9963	0.9966	0.9968	0.9971	0.9973	0.9976	0.9978
Forecast Region		0 - 4	0.9977	0.9990	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994
Forecast Region		5 - 9	0.9991	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998
Forecast Region		10 - 14	0.9986	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995
Forecast Region		15 - 19	0.9977	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991
Forecast Region		20 - 24	0.9966	0.9984	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988
Forecast Region		25 - 29	0.9949	0.9981	0.9981	0.9982	0.9982	0.9983	0.9984	0.9985	0.9985	0.9986
Forecast Region		30 - 34	0.9928	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980
Forecast Region		35 - 39	0.9912	0.9955	0.9956	0.9957	0.9959	0.9961	0.9962	0.9964	0.9966	0.9968
Forecast Region		40 - 44	0.9885	0.9924	0.9926	0.9929	0.9932	0.9935	0.9938	0.9941	0.9944	0.9947
Forecast Region		45 - 49	0.9826	0.9882	0.9885	0.9890	0.9894	0.9899	0.9904	0.9908	0.9913	0.9918
Forecast Region		50 - 54	0.9727	0.9825	0.9829	0.9836	0.9843	0.9849	0.9856	0.9863	0.9870	0.9877
Forecast Region		55 - 59	0.9577	0.9733	0.9739	0.9750	0.9760	0.9770	0.9780	0.9790	0.9800	0.9811
Forecast Region		60 - 64	0.9367	0.9592	0.9600	0.9615	0.9629	0.9643	0.9658	0.9672	0.9686	0.9701
Forecast Region		65 - 69	0.9047	0.9369	0.9381	0.9402	0.9422	0.9443	0.9464	0.9485	0.9505	0.9526
Forecast Region		70 - 74	0.8568	0.8999	0.9019	0.9051	0.9083	0.9115	0.9147	0.9179	0.9212	0.9244
Forecast Region		75 - 79	0.7837	0.8402	0.8432	0.8482	0.8533	0.8583	0.8633	0.8684	0.8734	0.8784
Forecast Region		80 - 84	0.6836	0.7421	0.7460	0.7523	0.7587	0.7651	0.7714	0.7778	0.7841	0.7905
Forecast Region		85 +	0.4085	0.4559	0.4604	0.4678	0.4752	0.4827	0.4901	0.4975	0.5049	0.5123
New York City	MALE	Births	0.9875	0.9955	0.9957	0.9959	0.9962	0.9965	0.9968	0.9971	0.9974	0.9976
New York City		0 - 4	0.9969	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993
New York City		5 - 9	0.9986	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
New York City		10 - 14	0.9948	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987
New York City		15 - 19	0.9896	0.9965	0.9966	0.9967	0.9968	0.9969	0.9971	0.9972	0.9973	0.9974
New York City		20 - 24	0.9864	0.9959	0.9960	0.9962	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971
New York City		25 - 29	0.9814	0.9956	0.9957	0.9959	0.9960	0.9962	0.9964	0.9965	0.9967	0.9969
New York City		30 - 34	0.9723	0.9948	0.9949	0.9951	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
New York City		35 - 39	0.9651	0.9918	0.9920	0.9923	0.9926	0.9929	0.9932	0.9935	0.9938	0.9941
New York City		40 - 44	0.9617	0.9858	0.9862	0.9867	0.9873	0.9878	0.9884	0.9889	0.9895	0.9900
New York City		45 - 49	0.9557	0.9771	0.9776	0.9785	0.9794	0.9803	0.9812	0.9821	0.9831	0.9840
New York City		50 - 54	0.9442	0.9657	0.9665	0.9678	0.9691	0.9705	0.9718	0.9732	0.9745	0.9758
New York City		55 - 59	0.9237	0.9514	0.9525	0.9544	0.9562	0.9581	0.9599	0.9618	0.9637	0.9655
New York City		60 - 64	0.8909	0.9313	0.9328	0.9352	0.9376	0.9400	0.9424	0.9448	0.9472	0.9496
New York City		65 - 69	0.8446	0.9035	0.9054	0.9085	0.9117	0.9149	0.9180	0.9212	0.9244	0.9275
New York City		70 - 74	0.7798	0.8592	0.8619	0.8664	0.8710	0.8755	0.8800	0.8845	0.8891	0.8936
New York City		75 - 79	0.6880	0.7892	0.7932	0.7998	0.8065	0.8131	0.8197	0.8264	0.8330	0.8397
New York City		80 - 84	0.5993	0.7020	0.7065	0.7138	0.7212	0.7285	0.7359	0.7432	0.7506	0.7579
New York City		85 +	0.3859	0.4541	0.4586	0.4660	0.4735	0.4809	0.4883	0.4958	0.5032	0.5107
New York City	FEMALE	Births	0.9901	0.9959	0.9960	0.9963	0.9965	0.9968	0.9971	0.9973	0.9976	0.9978
New York City		0 - 4	0.9972	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
New York City		5 - 9	0.9989	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997
New York City		10 - 14	0.9983	0.9994	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996
New York City		15 - 19	0.9970	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993
New York City		20 - 24	0.9958	0.9986	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9990
New York City		25 - 29	0.9933	0.9983	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9988
New York City		30 - 34	0.9898	0.9974	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981
New York City		35 - 39	0.9879	0.9952	0.9953	0.9955	0.9956	0.9958	0.9960	0.9962	0.9964	0.9965
New York City		40 - 44	0.9854	0.9914	0.9916	0.9919	0.9923	0.9926	0.9929	0.9933	0.9936	0.9939
New York City		45 - 49	0.9788	0.9866	0.9869	0.9875	0.9880	0.9885	0.9890	0.9896	0.9901	0.9906
New York City		50 - 54	0.9690	0.9811	0.9815	0.9823	0.9830	0.9838	0.9845	0.9852	0.9860	0.9867
New York City		55 - 59	0.9536	0.9721	0.9728	0.9738	0.9749	0.9760	0.9770	0.9781	0.9791	0.9802
New York City		60 - 64	0.9319	0.9584	0.9592	0.9607	0.9622	0.9636	0.9651	0.9665	0.9680	0.9695
New York City		65 - 69	0.9033	0.9385	0.9397	0.9417	0.9437	0.9457	0.9478	0.9498	0.9518	0.9538
New York City		70 - 74	0.8601	0.9065	0.9083	0.9113	0.9143	0.9173	0.9203	0.9233	0.9263	0.9293
New York City		75 - 79	0.7917	0.8557	0.8584	0.8630	0.8675	0.8721	0.8766	0.8812	0.8857	0.8903
New York City		80 - 84	0.6944	0.7631	0.7666	0.7724	0.7783	0.7841	0.7900	0.7958	0.8017	0.8075
New York City		85 +	0.4261	0.4931	0.4972	0.5042	0.5111	0.5180	0.5249	0.5318	0.5387	0.5456
Bronx County	MALE	Births	0.9868	0.9934	0.9934	0.9934	0.9939	0.9939	0.9943	0.9943	0.9946	0.9946
Bronx County		0 - 4	0.9967	0.9985	0.9985	0.9985	0.9986	0.9986	0.9986	0.9986	0.9987	0.9987
Bronx County		5 - 9	0.9983	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995
Bronx County		10 - 14	0.9920	0.9982	0.9982	0.9982	0.9983	0.9983	0.9984	0.9984	0.9985	0.9985
Bronx County		15 - 19	0.9850	0.9962	0.9962	0.9962	0.9964	0.9964	0.9966	0.9966	0.9968	0.9968
Bronx County		20 - 24	0.9806	0.9945	0.9945	0.9945	0.9948	0.9948	0.9950	0.9950	0.9952	0.9952
Bronx County		25 - 29	0.9740	0.9933	0.9933	0.9933	0.9936	0.9936	0.9938	0.9938	0.9940	0.9940
Bronx County		30 - 34	0.9638	0.9914	0.9914	0.9914	0.9918	0.9918	0.9921	0.9921	0.9924	0.9924
Bronx County		35 - 39	0.9553	0.9863	0.9863	0.9863	0.9868	0.9868	0.9873	0.9873	0.9877	0.9877
Bronx County		40 - 44	0.9548	0.9795	0.9795	0.9795	0.9803	0.9803	0.9810	0.9810	0.9817	0.9817
Bronx County		45 - 49	0.9508	0.9690	0.9690	0.9690	0.9702	0.9702	0.9711	0.9711	0.9720	0.9720
Bronx County		50 - 54	0.9370	0.9504	0.9504	0.9504	0.9520	0.9520	0.9534	0.9534	0.9545	0.9545
Bronx County		55 - 59	0.9124	0.9333	0.9333	0.9333	0.9358	0.9358	0.9378	0.9378	0.9396	0.9396
Bronx County		60 - 64	0.8762	0.9112	0.9112	0.9112	0.9148	0.9148	0.9177	0.9177	0.9203	0.9203
Bronx County		65 - 69	0.8333	0.8771	0.8771	0.8771	0.8823	0.8823	0.8866	0.8866	0.8905	0.8905
Bronx County		70 - 74	0.7687	0.8315	0.8315	0.8315	0.8391	0.8391	0.8457	0.8457	0.8514	0.8514
Bronx County		75 - 79	0.6711	0.7582	0.7582	0.7582	0.7690	0.7690	0.7788	0.7788	0.7875	0.7875
Bronx County		80 - 84	0.5801	0.6597	0.6597	0.6597	0.6728	0.6728	0.6855	0.6855	0.6970	0.6970

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Bronx County	FEMALE	85 +	0.3605	0.4510	0.4510	0.4510	0.4618	0.4618	0.4739	0.4739	0.4854	0.4854
Bronx County		Births	0.9874	0.9941	0.9941	0.9941	0.9945	0.9945	0.9949	0.9949	0.9952	0.9952
Bronx County		0 - 4	0.9966	0.9987	0.9987	0.9987	0.9988	0.9988	0.9988	0.9988	0.9989	0.9989
Bronx County		5 - 9	0.9988	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997
Bronx County		10 - 14	0.9974	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995
Bronx County		15 - 19	0.9956	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9989
Bronx County		20 - 24	0.9940	0.9978	0.9978	0.9978	0.9979	0.9979	0.9980	0.9980	0.9981	0.9981
Bronx County		25 - 29	0.9903	0.9968	0.9968	0.9968	0.9969	0.9969	0.9971	0.9971	0.9972	0.9972
Bronx County		30 - 34	0.9854	0.9954	0.9954	0.9954	0.9956	0.9956	0.9957	0.9957	0.9959	0.9959
Bronx County		35 - 39	0.9831	0.9921	0.9921	0.9921	0.9924	0.9924	0.9926	0.9926	0.9928	0.9928
Bronx County		40 - 44	0.9806	0.9878	0.9878	0.9878	0.9882	0.9882	0.9885	0.9885	0.9888	0.9888
Bronx County		45 - 49	0.9750	0.9826	0.9826	0.9826	0.9832	0.9832	0.9837	0.9837	0.9841	0.9841
Bronx County		50 - 54	0.9637	0.9747	0.9747	0.9747	0.9756	0.9756	0.9764	0.9764	0.9771	0.9771
Bronx County		55 - 59	0.9451	0.9634	0.9634	0.9634	0.9648	0.9648	0.9661	0.9661	0.9672	0.9672
Bronx County		60 - 64	0.9236	0.9483	0.9483	0.9483	0.9504	0.9504	0.9523	0.9523	0.9540	0.9540
Bronx County		65 - 69	0.8995	0.9289	0.9289	0.9289	0.9320	0.9320	0.9350	0.9350	0.9376	0.9376
Bronx County		70 - 74	0.8567	0.8917	0.8917	0.8917	0.8966	0.8966	0.9013	0.9013	0.9055	0.9055
Bronx County		75 - 79	0.7874	0.8327	0.8327	0.8327	0.8405	0.8405	0.8482	0.8482	0.8550	0.8550
Bronx County		80 - 84	0.6898	0.7419	0.7419	0.7419	0.7521	0.7521	0.7626	0.7626	0.7722	0.7722
Bronx County		85 +	0.4172	0.4917	0.4917	0.4917	0.5007	0.5007	0.5110	0.5110	0.5209	0.5209
Kings County	MALE	Births	0.9852	0.9944	0.9944	0.9944	0.9950	0.9950	0.9954	0.9954	0.9957	0.9957
Kings County		0 - 4	0.9967	0.9986	0.9986	0.9986	0.9987	0.9987	0.9987	0.9987	0.9988	0.9988
Kings County		5 - 9	0.9986	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
Kings County		10 - 14	0.9945	0.9978	0.9978	0.9978	0.9979	0.9979	0.9980	0.9980	0.9981	0.9981
Kings County		15 - 19	0.9879	0.9958	0.9958	0.9958	0.9961	0.9961	0.9962	0.9962	0.9964	0.9964
Kings County		20 - 24	0.9840	0.9951	0.9951	0.9951	0.9953	0.9953	0.9955	0.9955	0.9957	0.9957
Kings County		25 - 29	0.9797	0.9947	0.9947	0.9947	0.9950	0.9950	0.9952	0.9952	0.9954	0.9954
Kings County		30 - 34	0.9712	0.9937	0.9937	0.9937	0.9940	0.9940	0.9944	0.9944	0.9946	0.9946
Kings County		35 - 39	0.9649	0.9902	0.9902	0.9902	0.9907	0.9907	0.9912	0.9912	0.9916	0.9916
Kings County		40 - 44	0.9610	0.9833	0.9833	0.9833	0.9841	0.9841	0.9848	0.9848	0.9855	0.9855
Kings County		45 - 49	0.9544	0.9742	0.9742	0.9742	0.9753	0.9753	0.9763	0.9763	0.9771	0.9771
Kings County		50 - 54	0.9426	0.9630	0.9630	0.9630	0.9647	0.9647	0.9660	0.9660	0.9672	0.9672
Kings County		55 - 59	0.9202	0.9503	0.9503	0.9503	0.9528	0.9528	0.9549	0.9549	0.9566	0.9566
Kings County		60 - 64	0.8881	0.9295	0.9295	0.9295	0.9332	0.9332	0.9362	0.9362	0.9388	0.9388
Kings County		65 - 69	0.8402	0.8997	0.8997	0.8997	0.9050	0.9050	0.9094	0.9094	0.9134	0.9134
Kings County		70 - 74	0.7709	0.8558	0.8558	0.8558	0.8636	0.8636	0.8704	0.8704	0.8764	0.8764
Kings County		75 - 79	0.6816	0.7894	0.7894	0.7894	0.8007	0.8007	0.8110	0.8110	0.8200	0.8200
Kings County		80 - 84	0.5927	0.6929	0.6929	0.6929	0.7066	0.7066	0.7200	0.7200	0.7320	0.7320
Kings County		85 +	0.3867	0.4568	0.4568	0.4568	0.4677	0.4677	0.4800	0.4800	0.4916	0.4916
Kings County	FEMALE	Births	0.9893	0.9954	0.9954	0.9954	0.9958	0.9958	0.9962	0.9962	0.9965	0.9965
Kings County		0 - 4	0.9968	0.9989	0.9989	0.9989	0.9990	0.9990	0.9990	0.9990	0.9991	0.9991
Kings County		5 - 9	0.9988	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996
Kings County		10 - 14	0.9982	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994
Kings County		15 - 19	0.9965	0.9988	0.9988	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990
Kings County		20 - 24	0.9949	0.9983	0.9983	0.9983	0.9984	0.9984	0.9984	0.9984	0.9985	0.9985
Kings County		25 - 29	0.9916	0.9978	0.9978	0.9978	0.9979	0.9979	0.9980	0.9980	0.9981	0.9981
Kings County		30 - 34	0.9879	0.9966	0.9966	0.9966	0.9968	0.9968	0.9969	0.9969	0.9971	0.9971
Kings County		35 - 39	0.9870	0.9940	0.9940	0.9940	0.9943	0.9943	0.9945	0.9945	0.9948	0.9948

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Kings County		40 - 44	0.9837	0.9894	0.9894	0.9894	0.9898	0.9898	0.9902	0.9902	0.9905	0.9905
Kings County		45 - 49	0.9756	0.9844	0.9844	0.9844	0.9850	0.9850	0.9855	0.9855	0.9859	0.9859
Kings County		50 - 54	0.9659	0.9788	0.9788	0.9788	0.9798	0.9798	0.9805	0.9805	0.9812	0.9812
Kings County		55 - 59	0.9512	0.9706	0.9706	0.9706	0.9720	0.9720	0.9733	0.9733	0.9744	0.9744
Kings County		60 - 64	0.9280	0.9570	0.9570	0.9570	0.9591	0.9591	0.9611	0.9611	0.9628	0.9628
Kings County		65 - 69	0.8984	0.9353	0.9353	0.9353	0.9384	0.9384	0.9414	0.9414	0.9441	0.9441
Kings County		70 - 74	0.8563	0.9004	0.9004	0.9004	0.9053	0.9053	0.9101	0.9101	0.9144	0.9144
Kings County		75 - 79	0.7877	0.8456	0.8456	0.8456	0.8535	0.8535	0.8613	0.8613	0.8682	0.8682
Kings County		80 - 84	0.6917	0.7583	0.7583	0.7583	0.7688	0.7688	0.7795	0.7795	0.7893	0.7893
Kings County		85 +	0.4288	0.4978	0.4978	0.4978	0.5069	0.5069	0.5174	0.5174	0.5274	0.5274
New York County	MALE	Births	0.9887	0.9948	0.9948	0.9948	0.9953	0.9953	0.9957	0.9957	0.9961	0.9961
New York County		0 - 4	0.9966	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9989
New York County		5 - 9	0.9980	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995
New York County		10 - 14	0.9946	0.9985	0.9985	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988
New York County		15 - 19	0.9905	0.9974	0.9974	0.9974	0.9976	0.9976	0.9978	0.9978	0.9980	0.9980
New York County		20 - 24	0.9878	0.9975	0.9975	0.9975	0.9978	0.9978	0.9980	0.9980	0.9982	0.9982
New York County		25 - 29	0.9799	0.9975	0.9975	0.9975	0.9977	0.9977	0.9979	0.9979	0.9981	0.9981
New York County		30 - 34	0.9650	0.9960	0.9960	0.9960	0.9964	0.9964	0.9967	0.9967	0.9970	0.9970
New York County		35 - 39	0.9534	0.9925	0.9925	0.9925	0.9930	0.9930	0.9935	0.9935	0.9939	0.9939
New York County		40 - 44	0.9485	0.9866	0.9866	0.9866	0.9874	0.9874	0.9881	0.9881	0.9888	0.9888
New York County		45 - 49	0.9446	0.9785	0.9785	0.9785	0.9796	0.9796	0.9806	0.9806	0.9815	0.9815
New York County		50 - 54	0.9375	0.9687	0.9687	0.9687	0.9703	0.9703	0.9717	0.9717	0.9729	0.9729
New York County		55 - 59	0.9234	0.9555	0.9555	0.9555	0.9580	0.9580	0.9601	0.9601	0.9619	0.9619
New York County		60 - 64	0.8935	0.9378	0.9378	0.9378	0.9415	0.9415	0.9445	0.9445	0.9472	0.9472
New York County		65 - 69	0.8503	0.9117	0.9117	0.9117	0.9171	0.9171	0.9216	0.9216	0.9256	0.9256
New York County		70 - 74	0.7935	0.8731	0.8731	0.8731	0.8812	0.8812	0.8881	0.8881	0.8941	0.8941
New York County		75 - 79	0.7105	0.8056	0.8056	0.8056	0.8172	0.8172	0.8276	0.8276	0.8369	0.8369
New York County		80 - 84	0.6209	0.7017	0.7017	0.7017	0.7156	0.7156	0.7292	0.7292	0.7414	0.7414
New York County		85 +	0.3942	0.4437	0.4437	0.4437	0.4543	0.4543	0.4662	0.4662	0.4776	0.4776
New York County	FEMALE	Births	0.9908	0.9963	0.9963	0.9963	0.9967	0.9967	0.9971	0.9971	0.9974	0.9974
New York County		0 - 4	0.9974	0.9991	0.9991	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992
New York County		5 - 9	0.9987	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
New York County		10 - 14	0.9982	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995
New York County		15 - 19	0.9973	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995
New York County		20 - 24	0.9964	0.9992	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994
New York County		25 - 29	0.9942	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991
New York County		30 - 34	0.9906	0.9978	0.9978	0.9978	0.9979	0.9979	0.9981	0.9981	0.9983	0.9983
New York County		35 - 39	0.9878	0.9952	0.9952	0.9952	0.9955	0.9955	0.9957	0.9957	0.9960	0.9960
New York County		40 - 44	0.9853	0.9915	0.9915	0.9915	0.9919	0.9919	0.9923	0.9923	0.9926	0.9926
New York County		45 - 49	0.9808	0.9871	0.9871	0.9871	0.9877	0.9877	0.9882	0.9882	0.9886	0.9886
New York County		50 - 54	0.9728	0.9811	0.9811	0.9811	0.9820	0.9820	0.9827	0.9827	0.9834	0.9834
New York County		55 - 59	0.9568	0.9747	0.9747	0.9747	0.9761	0.9761	0.9774	0.9774	0.9785	0.9785
New York County		60 - 64	0.9360	0.9642	0.9642	0.9642	0.9663	0.9663	0.9683	0.9683	0.9701	0.9701
New York County		65 - 69	0.9091	0.9456	0.9456	0.9456	0.9488	0.9488	0.9518	0.9518	0.9545	0.9545
New York County		70 - 74	0.8655	0.9121	0.9121	0.9121	0.9171	0.9171	0.9219	0.9219	0.9263	0.9263
New York County		75 - 79	0.8007	0.8601	0.8601	0.8601	0.8681	0.8681	0.8761	0.8761	0.8831	0.8831
New York County		80 - 84	0.7095	0.7755	0.7755	0.7755	0.7862	0.7862	0.7972	0.7972	0.8071	0.8071
New York County		85 +	0.4605	0.4990	0.4990	0.4990	0.5082	0.5082	0.5187	0.5187	0.5287	0.5287

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Queens County	MALE	Births	0.9900	0.9950	0.9950	0.9950	0.9955	0.9955	0.9959	0.9959	0.9963	0.9963
Queens County		0 - 4	0.9976	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9989
Queens County		5 - 9	0.9991	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995
Queens County		10 - 14	0.9969	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991
Queens County		15 - 19	0.9934	0.9976	0.9976	0.9976	0.9978	0.9978	0.9980	0.9980	0.9982	0.9982
Queens County		20 - 24	0.9907	0.9965	0.9965	0.9965	0.9968	0.9968	0.9970	0.9970	0.9972	0.9972
Queens County		25 - 29	0.9877	0.9962	0.9962	0.9962	0.9964	0.9964	0.9967	0.9967	0.9969	0.9969
Queens County		30 - 34	0.9830	0.9950	0.9950	0.9950	0.9953	0.9953	0.9956	0.9956	0.9959	0.9959
Queens County		35 - 39	0.9777	0.9923	0.9923	0.9923	0.9928	0.9928	0.9933	0.9933	0.9937	0.9937
Queens County		40 - 44	0.9746	0.9881	0.9881	0.9881	0.9889	0.9889	0.9896	0.9896	0.9903	0.9903
Queens County		45 - 49	0.9679	0.9811	0.9811	0.9811	0.9823	0.9823	0.9832	0.9832	0.9841	0.9841
Queens County		50 - 54	0.9543	0.9718	0.9718	0.9718	0.9735	0.9735	0.9748	0.9748	0.9760	0.9760
Queens County		55 - 59	0.9335	0.9592	0.9592	0.9592	0.9618	0.9618	0.9639	0.9639	0.9657	0.9657
Queens County		60 - 64	0.8984	0.9405	0.9405	0.9405	0.9442	0.9442	0.9473	0.9473	0.9499	0.9499
Queens County		65 - 69	0.8508	0.9111	0.9111	0.9111	0.9165	0.9165	0.9210	0.9210	0.9250	0.9250
Queens County		70 - 74	0.7894	0.8622	0.8622	0.8622	0.8701	0.8701	0.8770	0.8770	0.8830	0.8830
Queens County		75 - 79	0.6926	0.7891	0.7891	0.7891	0.8004	0.8004	0.8106	0.8106	0.8197	0.8197
Queens County		80 - 84	0.6070	0.6872	0.6872	0.6872	0.7008	0.7008	0.7141	0.7141	0.7261	0.7261
Queens County		85 +	0.3999	0.4550	0.4550	0.4550	0.4659	0.4659	0.4781	0.4781	0.4897	0.4897
Queens County	FEMALE	Births	0.9926	0.9958	0.9958	0.9958	0.9962	0.9962	0.9965	0.9965	0.9968	0.9968
Queens County		0 - 4	0.9978	0.9988	0.9988	0.9988	0.9989	0.9989	0.9989	0.9989	0.9990	0.9990
Queens County		5 - 9	0.9991	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996
Queens County		10 - 14	0.9989	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994
Queens County		15 - 19	0.9981	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9990	0.9990
Queens County		20 - 24	0.9970	0.9986	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989
Queens County		25 - 29	0.9956	0.9984	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9987
Queens County		30 - 34	0.9930	0.9979	0.9979	0.9979	0.9981	0.9981	0.9982	0.9982	0.9984	0.9984
Queens County		35 - 39	0.9912	0.9961	0.9961	0.9961	0.9964	0.9964	0.9966	0.9966	0.9969	0.9969
Queens County		40 - 44	0.9894	0.9931	0.9931	0.9931	0.9935	0.9935	0.9938	0.9938	0.9941	0.9941
Queens County		45 - 49	0.9829	0.9894	0.9894	0.9894	0.9900	0.9900	0.9905	0.9905	0.9910	0.9910
Queens County		50 - 54	0.9730	0.9852	0.9852	0.9852	0.9861	0.9861	0.9869	0.9869	0.9876	0.9876
Queens County		55 - 59	0.9586	0.9775	0.9775	0.9775	0.9789	0.9789	0.9802	0.9802	0.9814	0.9814
Queens County		60 - 64	0.9373	0.9641	0.9641	0.9641	0.9663	0.9663	0.9683	0.9683	0.9700	0.9700
Queens County		65 - 69	0.9074	0.9440	0.9440	0.9440	0.9472	0.9472	0.9502	0.9502	0.9529	0.9529
Queens County		70 - 74	0.8653	0.9100	0.9100	0.9100	0.9150	0.9150	0.9198	0.9198	0.9241	0.9241
Queens County		75 - 79	0.7977	0.8525	0.8525	0.8525	0.8604	0.8604	0.8683	0.8683	0.8753	0.8753
Queens County		80 - 84	0.6967	0.7576	0.7576	0.7576	0.7681	0.7681	0.7788	0.7788	0.7885	0.7885
Queens County		85 +	0.4169	0.4973	0.4973	0.4973	0.5063	0.5063	0.5168	0.5168	0.5268	0.5268
Richmond County	MALE	Births	0.9904	0.9953	0.9953	0.9953	0.9958	0.9958	0.9963	0.9963	0.9966	0.9966
Richmond County		0 - 4	0.9973	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9990	0.9990
Richmond County		5 - 9	0.9992	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998
Richmond County		10 - 14	0.9974	0.9985	0.9985	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988
Richmond County		15 - 19	0.9942	0.9965	0.9965	0.9965	0.9967	0.9967	0.9969	0.9969	0.9971	0.9971
Richmond County		20 - 24	0.9925	0.9952	0.9952	0.9952	0.9954	0.9954	0.9956	0.9956	0.9958	0.9958
Richmond County		25 - 29	0.9879	0.9942	0.9942	0.9942	0.9944	0.9944	0.9947	0.9947	0.9949	0.9949
Richmond County		30 - 34	0.9827	0.9933	0.9933	0.9933	0.9937	0.9937	0.9940	0.9940	0.9943	0.9943
Richmond County		35 - 39	0.9839	0.9918	0.9918	0.9918	0.9923	0.9923	0.9928	0.9928	0.9932	0.9932
Richmond County		40 - 44	0.9798	0.9855	0.9855	0.9855	0.9863	0.9863	0.9870	0.9870	0.9876	0.9876

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Richmond County		45 - 49	0.9646	0.9774	0.9774	0.9774	0.9786	0.9786	0.9795	0.9795	0.9804	0.9804
Richmond County		50 - 54	0.9500	0.9697	0.9697	0.9697	0.9714	0.9714	0.9727	0.9727	0.9739	0.9739
Richmond County		55 - 59	0.9240	0.9562	0.9562	0.9562	0.9587	0.9587	0.9608	0.9608	0.9625	0.9625
Richmond County		60 - 64	0.8920	0.9325	0.9325	0.9325	0.9362	0.9362	0.9392	0.9392	0.9418	0.9418
Richmond County		65 - 69	0.8413	0.9011	0.9011	0.9011	0.9064	0.9064	0.9109	0.9109	0.9148	0.9148
Richmond County		70 - 74	0.7499	0.8432	0.8432	0.8432	0.8509	0.8509	0.8576	0.8576	0.8634	0.8634
Richmond County		75 - 79	0.6535	0.7506	0.7506	0.7506	0.7614	0.7614	0.7711	0.7711	0.7797	0.7797
Richmond County		80 - 84	0.5591	0.6281	0.6281	0.6281	0.6405	0.6405	0.6527	0.6527	0.6636	0.6636
Richmond County		85 +	0.3435	0.3805	0.3805	0.3805	0.3895	0.3895	0.3997	0.3997	0.4095	0.4095
Richmond County	FEMALE	Births	0.9931	0.9959	0.9959	0.9959	0.9963	0.9963	0.9967	0.9967	0.9969	0.9969
Richmond County		0 - 4	0.9976	0.9990	0.9990	0.9990	0.9990	0.9990	0.9991	0.9991	0.9991	0.9991
Richmond County		5 - 9	0.9992	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
Richmond County		10 - 14	0.9996	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996
Richmond County		15 - 19	0.9988	0.9990	0.9990	0.9990	0.9991	0.9991	0.9991	0.9991	0.9992	0.9992
Richmond County		20 - 24	0.9984	0.9983	0.9983	0.9983	0.9984	0.9984	0.9984	0.9984	0.9985	0.9985
Richmond County		25 - 29	0.9972	0.9978	0.9978	0.9978	0.9980	0.9980	0.9981	0.9981	0.9982	0.9982
Richmond County		30 - 34	0.9945	0.9970	0.9970	0.9970	0.9972	0.9972	0.9973	0.9973	0.9975	0.9975
Richmond County		35 - 39	0.9919	0.9949	0.9949	0.9949	0.9952	0.9952	0.9954	0.9954	0.9956	0.9956
Richmond County		40 - 44	0.9896	0.9909	0.9909	0.9909	0.9913	0.9913	0.9916	0.9916	0.9919	0.9919
Richmond County		45 - 49	0.9801	0.9860	0.9860	0.9860	0.9866	0.9866	0.9871	0.9871	0.9875	0.9875
Richmond County		50 - 54	0.9670	0.9804	0.9804	0.9804	0.9813	0.9813	0.9821	0.9821	0.9828	0.9828
Richmond County		55 - 59	0.9526	0.9715	0.9715	0.9715	0.9729	0.9729	0.9742	0.9742	0.9753	0.9753
Richmond County		60 - 64	0.9321	0.9550	0.9550	0.9550	0.9572	0.9572	0.9591	0.9591	0.9609	0.9609
Richmond County		65 - 69	0.8966	0.9268	0.9268	0.9268	0.9299	0.9299	0.9328	0.9328	0.9355	0.9355
Richmond County		70 - 74	0.8383	0.8815	0.8815	0.8815	0.8863	0.8863	0.8910	0.8910	0.8951	0.8951
Richmond County		75 - 79	0.7474	0.8197	0.8197	0.8197	0.8274	0.8274	0.8350	0.8350	0.8417	0.8417
Richmond County		80 - 84	0.6392	0.7120	0.7120	0.7120	0.7218	0.7218	0.7319	0.7319	0.7410	0.7410
Richmond County		85 +	0.3304	0.4442	0.4442	0.4442	0.4523	0.4523	0.4616	0.4616	0.4705	0.4705
Long Island	MALE	Births	0.9918	0.9956	0.9958	0.9961	0.9964	0.9966	0.9969	0.9972	0.9974	0.9977
Long Island		0 - 4	0.9979	0.9990	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994
Long Island		5 - 9	0.9993	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9998
Long Island		10 - 14	0.9974	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9989
Long Island		15 - 19	0.9951	0.9956	0.9957	0.9958	0.9960	0.9961	0.9963	0.9964	0.9966	0.9967
Long Island		20 - 24	0.9941	0.9940	0.9941	0.9943	0.9945	0.9948	0.9950	0.9952	0.9954	0.9956
Long Island		25 - 29	0.9926	0.9941	0.9943	0.9945	0.9947	0.9949	0.9951	0.9953	0.9956	0.9958
Long Island		30 - 34	0.9892	0.9937	0.9938	0.9940	0.9943	0.9945	0.9947	0.9950	0.9952	0.9954
Long Island		35 - 39	0.9859	0.9920	0.9921	0.9924	0.9927	0.9930	0.9933	0.9937	0.9940	0.9943
Long Island		40 - 44	0.9829	0.9885	0.9888	0.9892	0.9897	0.9901	0.9906	0.9910	0.9915	0.9919
Long Island		45 - 49	0.9756	0.9837	0.9841	0.9848	0.9854	0.9860	0.9867	0.9873	0.9880	0.9886
Long Island		50 - 54	0.9606	0.9737	0.9743	0.9753	0.9763	0.9773	0.9784	0.9794	0.9804	0.9814
Long Island		55 - 59	0.9349	0.9603	0.9612	0.9627	0.9642	0.9658	0.9673	0.9688	0.9703	0.9718
Long Island		60 - 64	0.9015	0.9440	0.9451	0.9471	0.9491	0.9510	0.9530	0.9550	0.9569	0.9589
Long Island		65 - 69	0.8529	0.9129	0.9146	0.9175	0.9203	0.9232	0.9260	0.9289	0.9317	0.9346
Long Island		70 - 74	0.7764	0.8568	0.8595	0.8641	0.8687	0.8733	0.8779	0.8825	0.8871	0.8917
Long Island		75 - 79	0.6691	0.7757	0.7800	0.7870	0.7941	0.8012	0.8082	0.8153	0.8224	0.8294
Long Island		80 - 84	0.5694	0.6766	0.6814	0.6894	0.6974	0.7053	0.7133	0.7213	0.7293	0.7373
Long Island		85 +	0.3202	0.3965	0.4014	0.4097	0.4179	0.4261	0.4343	0.4426	0.4508	0.4590
Long Island	FEMALE	Births	0.9926	0.9957	0.9959	0.9962	0.9964	0.9967	0.9970	0.9972	0.9975	0.9978

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Long Island		0 - 4	0.9982	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9995
Long Island		5 - 9	0.9994	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999
Long Island		10 - 14	0.9989	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994
Long Island		15 - 19	0.9983	0.9980	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986
Long Island		20 - 24	0.9972	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984
Long Island		25 - 29	0.9967	0.9980	0.9981	0.9981	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986
Long Island		30 - 34	0.9962	0.9975	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982
Long Island		35 - 39	0.9938	0.9959	0.9960	0.9962	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971
Long Island		40 - 44	0.9903	0.9937	0.9939	0.9941	0.9944	0.9946	0.9949	0.9951	0.9953	0.9956
Long Island		45 - 49	0.9850	0.9901	0.9904	0.9907	0.9911	0.9915	0.9919	0.9923	0.9927	0.9931
Long Island		50 - 54	0.9743	0.9840	0.9844	0.9850	0.9857	0.9863	0.9869	0.9875	0.9881	0.9888
Long Island		55 - 59	0.9613	0.9752	0.9757	0.9767	0.9776	0.9786	0.9795	0.9805	0.9814	0.9824
Long Island		60 - 64	0.9411	0.9593	0.9601	0.9616	0.9630	0.9644	0.9658	0.9673	0.9687	0.9701
Long Island		65 - 69	0.9029	0.9380	0.9392	0.9412	0.9433	0.9453	0.9473	0.9494	0.9514	0.9534
Long Island		70 - 74	0.8448	0.8996	0.9016	0.9048	0.9080	0.9112	0.9144	0.9177	0.9209	0.9241
Long Island		75 - 79	0.7679	0.8338	0.8369	0.8421	0.8474	0.8526	0.8578	0.8631	0.8683	0.8736
Long Island		80 - 84	0.6610	0.7329	0.7369	0.7435	0.7501	0.7567	0.7633	0.7699	0.7764	0.7830
Long Island		85 +	0.3727	0.4358	0.4405	0.4482	0.4559	0.4635	0.4712	0.4789	0.4866	0.4943
Nassau County	MALE	Births	0.9924	0.9959	0.9961	0.9964	0.9966	0.9969	0.9971	0.9974	0.9976	0.9979
Nassau County		0 - 4	0.9982	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995
Nassau County		5 - 9	0.9991	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999
Nassau County		10 - 14	0.9974	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993
Nassau County		15 - 19	0.9958	0.9962	0.9963	0.9964	0.9966	0.9967	0.9968	0.9970	0.9971	0.9972
Nassau County		20 - 24	0.9947	0.9948	0.9949	0.9951	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962
Nassau County		25 - 29	0.9930	0.9952	0.9953	0.9955	0.9957	0.9958	0.9960	0.9962	0.9964	0.9965
Nassau County		30 - 34	0.9897	0.9945	0.9946	0.9948	0.9950	0.9952	0.9954	0.9957	0.9959	0.9961
Nassau County		35 - 39	0.9865	0.9928	0.9930	0.9933	0.9935	0.9938	0.9941	0.9943	0.9946	0.9949
Nassau County		40 - 44	0.9831	0.9898	0.9900	0.9904	0.9908	0.9912	0.9916	0.9920	0.9924	0.9928
Nassau County		45 - 49	0.9763	0.9857	0.9860	0.9866	0.9872	0.9877	0.9883	0.9889	0.9894	0.9900
Nassau County		50 - 54	0.9634	0.9764	0.9769	0.9779	0.9788	0.9797	0.9806	0.9815	0.9825	0.9834
Nassau County		55 - 59	0.9400	0.9635	0.9644	0.9658	0.9672	0.9685	0.9699	0.9713	0.9727	0.9741
Nassau County		60 - 64	0.9120	0.9481	0.9491	0.9510	0.9528	0.9546	0.9564	0.9582	0.9601	0.9619
Nassau County		65 - 69	0.8677	0.9194	0.9210	0.9236	0.9263	0.9289	0.9316	0.9342	0.9368	0.9395
Nassau County		70 - 74	0.7916	0.8668	0.8694	0.8736	0.8779	0.8822	0.8865	0.8908	0.8950	0.8993
Nassau County		75 - 79	0.6803	0.7865	0.7906	0.7973	0.8040	0.8108	0.8175	0.8242	0.8309	0.8377
Nassau County		80 - 84	0.5848	0.6877	0.6923	0.7000	0.7077	0.7155	0.7232	0.7309	0.7386	0.7463
Nassau County		85 +	0.3332	0.4036	0.4084	0.4166	0.4247	0.4328	0.4410	0.4491	0.4572	0.4654
Nassau County	FEMALE	Births	0.9927	0.9949	0.9951	0.9954	0.9958	0.9961	0.9964	0.9967	0.9970	0.9973
Nassau County		0 - 4	0.9978	0.9991	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9995
Nassau County		5 - 9	0.9994	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
Nassau County		10 - 14	0.9991	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9995
Nassau County		15 - 19	0.9987	0.9985	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989
Nassau County		20 - 24	0.9974	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9988
Nassau County		25 - 29	0.9968	0.9982	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987	0.9987
Nassau County		30 - 34	0.9965	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983	0.9984
Nassau County		35 - 39	0.9939	0.9960	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969	0.9970	0.9972
Nassau County		40 - 44	0.9904	0.9940	0.9941	0.9943	0.9946	0.9948	0.9950	0.9953	0.9955	0.9957
Nassau County		45 - 49	0.9862	0.9912	0.9914	0.9917	0.9921	0.9924	0.9928	0.9931	0.9935	0.9938

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Nassau County		50 - 54	0.9758	0.9853	0.9856	0.9862	0.9868	0.9874	0.9879	0.9885	0.9891	0.9897
Nassau County		55 - 59	0.9638	0.9774	0.9779	0.9787	0.9796	0.9805	0.9813	0.9822	0.9831	0.9839
Nassau County		60 - 64	0.9448	0.9615	0.9623	0.9636	0.9650	0.9663	0.9677	0.9690	0.9704	0.9717
Nassau County		65 - 69	0.9095	0.9426	0.9438	0.9457	0.9475	0.9494	0.9513	0.9532	0.9551	0.9569
Nassau County		70 - 74	0.8554	0.9062	0.9081	0.9111	0.9141	0.9171	0.9201	0.9231	0.9261	0.9291
Nassau County		75 - 79	0.7747	0.8464	0.8493	0.8541	0.8590	0.8638	0.8686	0.8735	0.8783	0.8832
Nassau County		80 - 84	0.6647	0.7441	0.7479	0.7542	0.7606	0.7669	0.7732	0.7795	0.7858	0.7921
Nassau County		85 +	0.3571	0.4438	0.4483	0.4559	0.4635	0.4711	0.4787	0.4862	0.4938	0.5014
Suffolk County	MALE	Births	0.9913	0.9954	0.9956	0.9959	0.9961	0.9964	0.9967	0.9970	0.9973	0.9976
Suffolk County		0 - 4	0.9977	0.9990	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994
Suffolk County		5 - 9	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
Suffolk County		10 - 14	0.9973	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985
Suffolk County		15 - 19	0.9944	0.9950	0.9951	0.9953	0.9954	0.9956	0.9958	0.9960	0.9961	0.9963
Suffolk County		20 - 24	0.9936	0.9933	0.9935	0.9937	0.9939	0.9942	0.9944	0.9947	0.9949	0.9951
Suffolk County		25 - 29	0.9923	0.9932	0.9934	0.9936	0.9939	0.9941	0.9944	0.9946	0.9949	0.9951
Suffolk County		30 - 34	0.9886	0.9930	0.9931	0.9934	0.9936	0.9939	0.9942	0.9944	0.9947	0.9949
Suffolk County		35 - 39	0.9853	0.9912	0.9914	0.9918	0.9921	0.9924	0.9928	0.9931	0.9934	0.9937
Suffolk County		40 - 44	0.9826	0.9875	0.9878	0.9882	0.9887	0.9892	0.9897	0.9902	0.9907	0.9912
Suffolk County		45 - 49	0.9750	0.9820	0.9824	0.9831	0.9838	0.9846	0.9853	0.9860	0.9867	0.9874
Suffolk County		50 - 54	0.9579	0.9711	0.9718	0.9729	0.9740	0.9751	0.9763	0.9774	0.9785	0.9796
Suffolk County		55 - 59	0.9289	0.9572	0.9582	0.9598	0.9614	0.9631	0.9647	0.9663	0.9680	0.9696
Suffolk County		60 - 64	0.8871	0.9402	0.9415	0.9436	0.9457	0.9478	0.9499	0.9519	0.9540	0.9561
Suffolk County		65 - 69	0.8320	0.9070	0.9089	0.9119	0.9150	0.9180	0.9211	0.9241	0.9272	0.9302
Suffolk County		70 - 74	0.7564	0.8473	0.8502	0.8551	0.8600	0.8649	0.8698	0.8747	0.8796	0.8845
Suffolk County		75 - 79	0.6553	0.7645	0.7689	0.7763	0.7838	0.7912	0.7986	0.8060	0.8134	0.8209
Suffolk County		80 - 84	0.5508	0.6646	0.6696	0.6779	0.6861	0.6944	0.7027	0.7110	0.7193	0.7275
Suffolk County		85 +	0.3084	0.3858	0.3908	0.3992	0.4075	0.4159	0.4243	0.4327	0.4410	0.4494
Suffolk County	FEMALE	Births	0.9926	0.9964	0.9966	0.9968	0.9970	0.9972	0.9974	0.9977	0.9979	0.9981
Suffolk County		0 - 4	0.9985	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995
Suffolk County		5 - 9	0.9994	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998
Suffolk County		10 - 14	0.9987	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993
Suffolk County		15 - 19	0.9979	0.9977	0.9977	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983
Suffolk County		20 - 24	0.9971	0.9974	0.9975	0.9976	0.9977	0.9978	0.9978	0.9979	0.9980	0.9981
Suffolk County		25 - 29	0.9966	0.9978	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983	0.9984	0.9984
Suffolk County		30 - 34	0.9959	0.9973	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980
Suffolk County		35 - 39	0.9937	0.9959	0.9959	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969	0.9970
Suffolk County		40 - 44	0.9901	0.9935	0.9937	0.9939	0.9942	0.9944	0.9947	0.9949	0.9952	0.9954
Suffolk County		45 - 49	0.9838	0.9891	0.9894	0.9898	0.9903	0.9907	0.9911	0.9915	0.9920	0.9924
Suffolk County		50 - 54	0.9727	0.9828	0.9832	0.9839	0.9846	0.9852	0.9859	0.9866	0.9872	0.9879
Suffolk County		55 - 59	0.9579	0.9731	0.9737	0.9747	0.9757	0.9768	0.9778	0.9788	0.9799	0.9809
Suffolk County		60 - 64	0.9359	0.9572	0.9581	0.9596	0.9611	0.9626	0.9641	0.9656	0.9671	0.9686
Suffolk County		65 - 69	0.8943	0.9336	0.9349	0.9370	0.9392	0.9414	0.9436	0.9458	0.9479	0.9501
Suffolk County		70 - 74	0.8321	0.8930	0.8951	0.8985	0.9020	0.9054	0.9088	0.9123	0.9157	0.9191
Suffolk County		75 - 79	0.7603	0.8193	0.8227	0.8284	0.8341	0.8398	0.8455	0.8512	0.8569	0.8626
Suffolk County		80 - 84	0.6568	0.7202	0.7244	0.7313	0.7382	0.7451	0.7520	0.7589	0.7658	0.7727
Suffolk County		85 +	0.3914	0.4259	0.4306	0.4384	0.4462	0.4541	0.4619	0.4697	0.4776	0.4854
Mid-Hudson	MALE	Births	0.9923	0.9952	0.9954	0.9957	0.9960	0.9963	0.9966	0.9969	0.9972	0.9975
Mid-Hudson		0 - 4	0.9979	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Mid-Hudson		5 - 9	0.9990	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996
Mid-Hudson		10 - 14	0.9971	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9989
Mid-Hudson		15 - 19	0.9946	0.9961	0.9962	0.9963	0.9965	0.9966	0.9967	0.9969	0.9970	0.9971
Mid-Hudson		20 - 24	0.9934	0.9940	0.9942	0.9944	0.9946	0.9948	0.9950	0.9952	0.9954	0.9957
Mid-Hudson		25 - 29	0.9921	0.9942	0.9943	0.9945	0.9947	0.9949	0.9952	0.9954	0.9956	0.9958
Mid-Hudson		30 - 34	0.9888	0.9943	0.9944	0.9946	0.9949	0.9951	0.9953	0.9955	0.9957	0.9959
Mid-Hudson		35 - 39	0.9858	0.9926	0.9928	0.9931	0.9933	0.9936	0.9939	0.9942	0.9944	0.9947
Mid-Hudson		40 - 44	0.9820	0.9889	0.9891	0.9896	0.9900	0.9904	0.9909	0.9913	0.9917	0.9922
Mid-Hudson		45 - 49	0.9745	0.9834	0.9838	0.9844	0.9851	0.9857	0.9864	0.9870	0.9877	0.9884
Mid-Hudson		50 - 54	0.9614	0.9737	0.9743	0.9754	0.9764	0.9774	0.9784	0.9794	0.9805	0.9815
Mid-Hudson		55 - 59	0.9357	0.9600	0.9609	0.9625	0.9640	0.9655	0.9670	0.9686	0.9701	0.9716
Mid-Hudson		60 - 64	0.8977	0.9421	0.9433	0.9453	0.9473	0.9494	0.9514	0.9534	0.9554	0.9575
Mid-Hudson		65 - 69	0.8465	0.9103	0.9121	0.9150	0.9180	0.9209	0.9239	0.9268	0.9297	0.9327
Mid-Hudson		70 - 74	0.7692	0.8641	0.8667	0.8711	0.8755	0.8798	0.8842	0.8886	0.8929	0.8973
Mid-Hudson		75 - 79	0.6795	0.7868	0.7909	0.7976	0.8043	0.8110	0.8177	0.8244	0.8312	0.8379
Mid-Hudson		80 - 84	0.5811	0.6862	0.6909	0.6986	0.7064	0.7141	0.7219	0.7296	0.7374	0.7451
Mid-Hudson		85 +	0.3573	0.4006	0.4055	0.4137	0.4219	0.4300	0.4382	0.4464	0.4546	0.4627
Mid-Hudson	FEMALE	Births	0.9939	0.9948	0.9950	0.9953	0.9956	0.9959	0.9963	0.9966	0.9969	0.9973
Mid-Hudson		0 - 4	0.9984	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
Mid-Hudson		5 - 9	0.9991	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
Mid-Hudson		10 - 14	0.9987	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
Mid-Hudson		15 - 19	0.9985	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9990
Mid-Hudson		20 - 24	0.9976	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9988	0.9988
Mid-Hudson		25 - 29	0.9969	0.9979	0.9980	0.9981	0.9981	0.9982	0.9983	0.9984	0.9984	0.9985
Mid-Hudson		30 - 34	0.9963	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982
Mid-Hudson		35 - 39	0.9944	0.9967	0.9968	0.9969	0.9970	0.9972	0.9973	0.9974	0.9975	0.9976
Mid-Hudson		40 - 44	0.9904	0.9939	0.9940	0.9943	0.9945	0.9947	0.9950	0.9952	0.9955	0.9957
Mid-Hudson		45 - 49	0.9854	0.9888	0.9890	0.9895	0.9899	0.9904	0.9908	0.9913	0.9917	0.9921
Mid-Hudson		50 - 54	0.9760	0.9835	0.9839	0.9845	0.9852	0.9858	0.9865	0.9871	0.9878	0.9884
Mid-Hudson		55 - 59	0.9606	0.9744	0.9750	0.9760	0.9770	0.9779	0.9789	0.9799	0.9809	0.9818
Mid-Hudson		60 - 64	0.9417	0.9596	0.9605	0.9619	0.9633	0.9647	0.9661	0.9676	0.9690	0.9704
Mid-Hudson		65 - 69	0.9086	0.9357	0.9369	0.9391	0.9412	0.9433	0.9454	0.9475	0.9496	0.9517
Mid-Hudson		70 - 74	0.8560	0.8981	0.9001	0.9034	0.9066	0.9099	0.9132	0.9164	0.9197	0.9230
Mid-Hudson		75 - 79	0.7819	0.8382	0.8413	0.8464	0.8515	0.8566	0.8617	0.8668	0.8719	0.8770
Mid-Hudson		80 - 84	0.6855	0.7417	0.7456	0.7519	0.7583	0.7647	0.7711	0.7774	0.7838	0.7902
Mid-Hudson		85 +	0.4217	0.4638	0.4682	0.4755	0.4828	0.4901	0.4974	0.5047	0.5120	0.5193
Dutchess County	MALE	Births	0.9930	0.9945	0.9947	0.9951	0.9954	0.9958	0.9961	0.9964	0.9968	0.9971
Dutchess County		0 - 4	0.9972	0.9985	0.9986	0.9987	0.9987	0.9988	0.9989	0.9990	0.9991	0.9992
Dutchess County		5 - 9	0.9992	0.9987	0.9987	0.9988	0.9989	0.9989	0.9990	0.9991	0.9992	0.9992
Dutchess County		10 - 14	0.9981	0.9985	0.9985	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989
Dutchess County		15 - 19	0.9963	0.9958	0.9959	0.9961	0.9962	0.9964	0.9965	0.9967	0.9968	0.9969
Dutchess County		20 - 24	0.9952	0.9930	0.9931	0.9934	0.9937	0.9939	0.9942	0.9944	0.9947	0.9949
Dutchess County		25 - 29	0.9926	0.9934	0.9935	0.9938	0.9940	0.9943	0.9945	0.9948	0.9950	0.9953
Dutchess County		30 - 34	0.9911	0.9938	0.9940	0.9942	0.9944	0.9947	0.9949	0.9951	0.9953	0.9956
Dutchess County		35 - 39	0.9885	0.9908	0.9910	0.9913	0.9917	0.9920	0.9924	0.9927	0.9931	0.9934
Dutchess County		40 - 44	0.9837	0.9849	0.9853	0.9859	0.9865	0.9870	0.9876	0.9882	0.9888	0.9894
Dutchess County		45 - 49	0.9782	0.9791	0.9796	0.9804	0.9813	0.9821	0.9829	0.9837	0.9846	0.9854
Dutchess County		50 - 54	0.9625	0.9731	0.9738	0.9748	0.9758	0.9769	0.9779	0.9790	0.9800	0.9811

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Dutchess County		55 - 59	0.9363	0.9610	0.9619	0.9634	0.9649	0.9663	0.9678	0.9693	0.9708	0.9723
Dutchess County		60 - 64	0.8923	0.9376	0.9389	0.9411	0.9433	0.9455	0.9476	0.9498	0.9520	0.9542
Dutchess County		65 - 69	0.8480	0.9038	0.9057	0.9089	0.9121	0.9152	0.9184	0.9215	0.9247	0.9278
Dutchess County		70 - 74	0.7952	0.8379	0.8410	0.8462	0.8514	0.8566	0.8618	0.8670	0.8722	0.8774
Dutchess County		75 - 79	0.6973	0.7583	0.7628	0.7705	0.7781	0.7857	0.7933	0.8009	0.8085	0.8162
Dutchess County		80 - 84	0.5930	0.6745	0.6793	0.6874	0.6954	0.7034	0.7115	0.7195	0.7275	0.7356
Dutchess County		85 +	0.3281	0.4563	0.4607	0.4682	0.4756	0.4830	0.4904	0.4978	0.5052	0.5126
Dutchess County	FEMALE	Births	0.9954	0.9920	0.9923	0.9928	0.9933	0.9938	0.9943	0.9948	0.9953	0.9958
Dutchess County		0 - 4	0.9992	0.9987	0.9988	0.9988	0.9989	0.9990	0.9991	0.9991	0.9992	0.9993
Dutchess County		5 - 9	0.9997	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
Dutchess County		10 - 14	0.9992	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993
Dutchess County		15 - 19	0.9978	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9993
Dutchess County		20 - 24	0.9979	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987
Dutchess County		25 - 29	0.9977	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988
Dutchess County		30 - 34	0.9968	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9990
Dutchess County		35 - 39	0.9950	0.9977	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9984
Dutchess County		40 - 44	0.9923	0.9946	0.9947	0.9949	0.9951	0.9953	0.9955	0.9957	0.9960	0.9962
Dutchess County		45 - 49	0.9831	0.9891	0.9894	0.9898	0.9902	0.9907	0.9911	0.9915	0.9920	0.9924
Dutchess County		50 - 54	0.9724	0.9830	0.9834	0.9841	0.9847	0.9854	0.9861	0.9867	0.9874	0.9880
Dutchess County		55 - 59	0.9610	0.9702	0.9709	0.9721	0.9732	0.9743	0.9755	0.9766	0.9777	0.9789
Dutchess County		60 - 64	0.9435	0.9560	0.9569	0.9585	0.9600	0.9616	0.9631	0.9646	0.9662	0.9677
Dutchess County		65 - 69	0.9074	0.9269	0.9283	0.9307	0.9331	0.9355	0.9379	0.9403	0.9427	0.9451
Dutchess County		70 - 74	0.8511	0.8794	0.8817	0.8856	0.8895	0.8934	0.8972	0.9011	0.9050	0.9089
Dutchess County		75 - 79	0.7775	0.8145	0.8181	0.8239	0.8297	0.8356	0.8414	0.8473	0.8531	0.8590
Dutchess County		80 - 84	0.6879	0.7210	0.7251	0.7320	0.7389	0.7458	0.7527	0.7595	0.7664	0.7733
Dutchess County		85 +	0.4453	0.4614	0.4658	0.4731	0.4805	0.4878	0.4952	0.5025	0.5098	0.5172
Orange County	MALE	Births	0.9915	0.9910	0.9914	0.9919	0.9925	0.9930	0.9936	0.9942	0.9947	0.9953
Orange County		0 - 4	0.9976	0.9984	0.9985	0.9986	0.9987	0.9988	0.9988	0.9989	0.9990	0.9991
Orange County		5 - 9	0.9992	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994	0.9994
Orange County		10 - 14	0.9974	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982
Orange County		15 - 19	0.9947	0.9951	0.9952	0.9953	0.9955	0.9957	0.9959	0.9960	0.9962	0.9964
Orange County		20 - 24	0.9908	0.9931	0.9933	0.9935	0.9938	0.9940	0.9943	0.9945	0.9948	0.9950
Orange County		25 - 29	0.9890	0.9940	0.9942	0.9944	0.9946	0.9948	0.9951	0.9953	0.9955	0.9957
Orange County		30 - 34	0.9901	0.9949	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962	0.9963
Orange County		35 - 39	0.9891	0.9929	0.9931	0.9933	0.9936	0.9939	0.9941	0.9944	0.9947	0.9949
Orange County		40 - 44	0.9832	0.9899	0.9901	0.9905	0.9909	0.9913	0.9917	0.9921	0.9925	0.9929
Orange County		45 - 49	0.9725	0.9841	0.9845	0.9851	0.9858	0.9864	0.9870	0.9876	0.9883	0.9889
Orange County		50 - 54	0.9568	0.9696	0.9703	0.9715	0.9727	0.9739	0.9751	0.9762	0.9774	0.9786
Orange County		55 - 59	0.9256	0.9540	0.9551	0.9568	0.9586	0.9603	0.9621	0.9639	0.9656	0.9674
Orange County		60 - 64	0.8844	0.9339	0.9353	0.9376	0.9400	0.9423	0.9446	0.9469	0.9492	0.9515
Orange County		65 - 69	0.8368	0.8960	0.8981	0.9015	0.9049	0.9083	0.9117	0.9151	0.9185	0.9219
Orange County		70 - 74	0.7437	0.8516	0.8544	0.8592	0.8640	0.8687	0.8735	0.8783	0.8830	0.8878
Orange County		75 - 79	0.6327	0.7762	0.7805	0.7875	0.7946	0.8016	0.8087	0.8157	0.8228	0.8298
Orange County		80 - 84	0.5381	0.6674	0.6723	0.6805	0.6887	0.6970	0.7052	0.7134	0.7216	0.7298
Orange County		85 +	0.3198	0.3677	0.3729	0.3815	0.3901	0.3988	0.4074	0.4160	0.4246	0.4333
Orange County	FEMALE	Births	0.9938	0.9942	0.9944	0.9948	0.9951	0.9955	0.9959	0.9962	0.9966	0.9970
Orange County		0 - 4	0.9980	0.9987	0.9988	0.9989	0.9989	0.9990	0.9991	0.9991	0.9992	0.9993
Orange County		5 - 9	0.9984	0.9996	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Orange County		10 - 14	0.9988	0.9991	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994
Orange County		15 - 19	0.9990	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990
Orange County		20 - 24	0.9981	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984
Orange County		25 - 29	0.9968	0.9964	0.9965	0.9966	0.9967	0.9969	0.9970	0.9971	0.9973	0.9974
Orange County		30 - 34	0.9965	0.9958	0.9959	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969	0.9970
Orange County		35 - 39	0.9942	0.9959	0.9960	0.9961	0.9963	0.9964	0.9966	0.9968	0.9969	0.9971
Orange County		40 - 44	0.9885	0.9927	0.9929	0.9932	0.9934	0.9937	0.9940	0.9943	0.9946	0.9949
Orange County		45 - 49	0.9819	0.9845	0.9849	0.9855	0.9861	0.9867	0.9873	0.9879	0.9885	0.9892
Orange County		50 - 54	0.9688	0.9778	0.9783	0.9791	0.9800	0.9809	0.9817	0.9826	0.9835	0.9843
Orange County		55 - 59	0.9494	0.9679	0.9686	0.9699	0.9711	0.9723	0.9735	0.9748	0.9760	0.9772
Orange County		60 - 64	0.9290	0.9465	0.9476	0.9495	0.9514	0.9533	0.9551	0.9570	0.9589	0.9607
Orange County		65 - 69	0.8972	0.9289	0.9303	0.9326	0.9350	0.9373	0.9396	0.9420	0.9443	0.9466
Orange County		70 - 74	0.8424	0.8922	0.8943	0.8978	0.9012	0.9047	0.9082	0.9116	0.9151	0.9185
Orange County		75 - 79	0.7694	0.8173	0.8208	0.8265	0.8323	0.8381	0.8438	0.8496	0.8553	0.8611
Orange County		80 - 84	0.6743	0.7164	0.7206	0.7276	0.7346	0.7416	0.7486	0.7556	0.7626	0.7696
Orange County		85 +	0.4152	0.4105	0.4153	0.4233	0.4314	0.4394	0.4474	0.4555	0.4635	0.4716
Putnam County	MALE	Births	0.9908	0.9981	0.9982	0.9983	0.9984	0.9985	0.9986	0.9988	0.9989	0.9990
Putnam County		0 - 4	0.9974	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999
Putnam County		5 - 9	0.9983	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Putnam County		10 - 14	0.9966	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
Putnam County		15 - 19	0.9923	0.9958	0.9959	0.9960	0.9962	0.9963	0.9964	0.9966	0.9967	0.9969
Putnam County		20 - 24	0.9933	0.9945	0.9946	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960
Putnam County		25 - 29	0.9965	0.9939	0.9941	0.9943	0.9945	0.9947	0.9950	0.9952	0.9954	0.9956
Putnam County		30 - 34	0.9942	0.9951	0.9952	0.9954	0.9955	0.9957	0.9959	0.9961	0.9963	0.9965
Putnam County		35 - 39	0.9921	0.9974	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981
Putnam County		40 - 44	0.9877	0.9961	0.9961	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971	0.9972
Putnam County		45 - 49	0.9765	0.9897	0.9899	0.9903	0.9908	0.9912	0.9916	0.9920	0.9924	0.9928
Putnam County		50 - 54	0.9660	0.9804	0.9809	0.9817	0.9824	0.9832	0.9839	0.9847	0.9855	0.9862
Putnam County		55 - 59	0.9476	0.9660	0.9668	0.9681	0.9694	0.9707	0.9720	0.9733	0.9746	0.9759
Putnam County		60 - 64	0.9141	0.9386	0.9399	0.9420	0.9442	0.9463	0.9485	0.9506	0.9528	0.9549
Putnam County		65 - 69	0.8745	0.8984	0.9004	0.9037	0.9070	0.9104	0.9137	0.9170	0.9204	0.9237
Putnam County		70 - 74	0.7979	0.8637	0.8663	0.8707	0.8751	0.8794	0.8838	0.8882	0.8926	0.8970
Putnam County		75 - 79	0.7055	0.7922	0.7961	0.8026	0.8092	0.8157	0.8223	0.8288	0.8354	0.8419
Putnam County		80 - 84	0.6345	0.6604	0.6654	0.6738	0.6822	0.6905	0.6989	0.7073	0.7157	0.7241
Putnam County		85 +	0.4676	0.2998	0.3056	0.3151	0.3247	0.3342	0.3437	0.3533	0.3628	0.3724
Putnam County	FEMALE	Births	0.9994	0.9941	0.9943	0.9947	0.9951	0.9955	0.9958	0.9962	0.9966	0.9969
Putnam County		0 - 4	0.9991	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996
Putnam County		5 - 9	0.9990	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Putnam County		10 - 14	0.9982	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982	0.9983	0.9984
Putnam County		15 - 19	0.9982	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	0.9981	0.9982	0.9983
Putnam County		20 - 24	0.9976	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Putnam County		25 - 29	0.9979	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Putnam County		30 - 34	0.9981	0.9992	0.9993	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9995
Putnam County		35 - 39	0.9960	0.9963	0.9964	0.9965	0.9966	0.9968	0.9969	0.9971	0.9972	0.9973
Putnam County		40 - 44	0.9924	0.9960	0.9961	0.9963	0.9964	0.9966	0.9968	0.9969	0.9971	0.9972
Putnam County		45 - 49	0.9841	0.9918	0.9920	0.9923	0.9926	0.9929	0.9933	0.9936	0.9939	0.9942
Putnam County		50 - 54	0.9742	0.9848	0.9851	0.9857	0.9863	0.9869	0.9875	0.9881	0.9887	0.9893
Putnam County		55 - 59	0.9555	0.9773	0.9778	0.9787	0.9796	0.9804	0.9813	0.9822	0.9830	0.9839

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Putnam County		60 - 64	0.9367	0.9518	0.9528	0.9545	0.9562	0.9578	0.9595	0.9612	0.9629	0.9646
Putnam County		65 - 69	0.9192	0.9196	0.9211	0.9238	0.9264	0.9291	0.9317	0.9343	0.9370	0.9396
Putnam County		70 - 74	0.8779	0.8868	0.8890	0.8926	0.8963	0.8999	0.9035	0.9072	0.9108	0.9144
Putnam County		75 - 79	0.7860	0.8245	0.8278	0.8333	0.8389	0.8444	0.8499	0.8555	0.8610	0.8665
Putnam County		80 - 84	0.7072	0.7272	0.7313	0.7380	0.7448	0.7515	0.7582	0.7650	0.7717	0.7784
Putnam County		85 +	0.4547	0.4611	0.4655	0.4729	0.4802	0.4876	0.4949	0.5023	0.5096	0.5170
Rockland County	MALE	Births	0.9898	0.9965	0.9967	0.9969	0.9971	0.9973	0.9975	0.9978	0.9980	0.9982
Rockland County		0 - 4	0.9978	0.9988	0.9988	0.9989	0.9989	0.9990	0.9991	0.9991	0.9992	0.9993
Rockland County		5 - 9	0.9990	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995	0.9995
Rockland County		10 - 14	0.9977	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987
Rockland County		15 - 19	0.9952	0.9948	0.9949	0.9951	0.9953	0.9955	0.9957	0.9958	0.9960	0.9962
Rockland County		20 - 24	0.9930	0.9938	0.9940	0.9942	0.9944	0.9946	0.9948	0.9951	0.9953	0.9955
Rockland County		25 - 29	0.9919	0.9961	0.9962	0.9964	0.9965	0.9966	0.9968	0.9969	0.9971	0.9972
Rockland County		30 - 34	0.9886	0.9959	0.9960	0.9962	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971
Rockland County		35 - 39	0.9882	0.9954	0.9955	0.9957	0.9959	0.9960	0.9962	0.9964	0.9965	0.9967
Rockland County		40 - 44	0.9855	0.9908	0.9911	0.9914	0.9918	0.9921	0.9925	0.9928	0.9932	0.9935
Rockland County		45 - 49	0.9793	0.9841	0.9845	0.9851	0.9857	0.9864	0.9870	0.9876	0.9882	0.9889
Rockland County		50 - 54	0.9700	0.9783	0.9788	0.9797	0.9805	0.9813	0.9822	0.9830	0.9839	0.9847
Rockland County		55 - 59	0.9425	0.9639	0.9647	0.9661	0.9675	0.9689	0.9702	0.9716	0.9730	0.9744
Rockland County		60 - 64	0.9008	0.9466	0.9477	0.9496	0.9514	0.9533	0.9552	0.9570	0.9589	0.9608
Rockland County		65 - 69	0.8337	0.9226	0.9241	0.9266	0.9292	0.9317	0.9343	0.9368	0.9393	0.9419
Rockland County		70 - 74	0.7252	0.8814	0.8837	0.8875	0.8913	0.8951	0.8989	0.9027	0.9065	0.9103
Rockland County		75 - 79	0.6324	0.7949	0.7987	0.8052	0.8117	0.8181	0.8246	0.8311	0.8375	0.8440
Rockland County		80 - 84	0.5470	0.6971	0.7016	0.7090	0.7165	0.7240	0.7315	0.7390	0.7464	0.7539
Rockland County		85 +	0.4082	0.3988	0.4037	0.4119	0.4201	0.4283	0.4365	0.4447	0.4529	0.4611
Rockland County	FEMALE	Births	0.9907	0.9953	0.9954	0.9957	0.9960	0.9963	0.9966	0.9969	0.9972	0.9975
Rockland County		0 - 4	0.9970	0.9983	0.9984	0.9984	0.9985	0.9986	0.9987	0.9988	0.9989	0.9990
Rockland County		5 - 9	0.9995	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999
Rockland County		10 - 14	0.9992	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997
Rockland County		15 - 19	0.9979	0.9993	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995
Rockland County		20 - 24	0.9980	0.9989	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992
Rockland County		25 - 29	0.9983	0.9979	0.9980	0.9981	0.9981	0.9982	0.9983	0.9984	0.9984	0.9985
Rockland County		30 - 34	0.9961	0.9972	0.9972	0.9973	0.9974	0.9976	0.9977	0.9978	0.9979	0.9980
Rockland County		35 - 39	0.9929	0.9970	0.9970	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978
Rockland County		40 - 44	0.9901	0.9939	0.9941	0.9943	0.9945	0.9948	0.9950	0.9952	0.9955	0.9957
Rockland County		45 - 49	0.9877	0.9900	0.9902	0.9906	0.9910	0.9914	0.9918	0.9922	0.9926	0.9930
Rockland County		50 - 54	0.9816	0.9875	0.9877	0.9882	0.9887	0.9892	0.9897	0.9902	0.9907	0.9912
Rockland County		55 - 59	0.9653	0.9784	0.9789	0.9797	0.9805	0.9814	0.9822	0.9830	0.9838	0.9847
Rockland County		60 - 64	0.9404	0.9651	0.9658	0.9671	0.9683	0.9695	0.9707	0.9719	0.9732	0.9744
Rockland County		65 - 69	0.9111	0.9428	0.9440	0.9458	0.9477	0.9496	0.9515	0.9533	0.9552	0.9571
Rockland County		70 - 74	0.8670	0.9117	0.9134	0.9163	0.9191	0.9219	0.9248	0.9276	0.9304	0.9333
Rockland County		75 - 79	0.7891	0.8524	0.8552	0.8599	0.8645	0.8692	0.8738	0.8785	0.8831	0.8878
Rockland County		80 - 84	0.6778	0.7497	0.7534	0.7596	0.7658	0.7720	0.7781	0.7843	0.7905	0.7967
Rockland County		85 +	0.3648	0.4470	0.4516	0.4591	0.4667	0.4742	0.4817	0.4893	0.4968	0.5044
Sullivan County	MALE	Births	0.9923	0.9950	0.9952	0.9955	0.9958	0.9961	0.9964	0.9968	0.9971	0.9974
Sullivan County		0 - 4	0.9971	0.9973	0.9974	0.9975	0.9977	0.9978	0.9980	0.9981	0.9983	0.9984
Sullivan County		5 - 9	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994	0.9994
Sullivan County		10 - 14	0.9938	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Sullivan County		15 - 19	0.9927	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Sullivan County		20 - 24	0.9953	0.9953	0.9954	0.9955	0.9957	0.9959	0.9961	0.9962	0.9964	0.9966
Sullivan County		25 - 29	0.9936	0.9888	0.9890	0.9895	0.9899	0.9903	0.9907	0.9911	0.9915	0.9920
Sullivan County		30 - 34	0.9886	0.9881	0.9883	0.9888	0.9892	0.9897	0.9901	0.9906	0.9910	0.9914
Sullivan County		35 - 39	0.9835	0.9901	0.9903	0.9907	0.9911	0.9914	0.9918	0.9922	0.9925	0.9929
Sullivan County		40 - 44	0.9791	0.9875	0.9878	0.9883	0.9888	0.9892	0.9897	0.9902	0.9907	0.9912
Sullivan County		45 - 49	0.9701	0.9807	0.9812	0.9820	0.9827	0.9835	0.9842	0.9850	0.9858	0.9865
Sullivan County		50 - 54	0.9400	0.9610	0.9619	0.9635	0.9650	0.9665	0.9680	0.9695	0.9710	0.9726
Sullivan County		55 - 59	0.9117	0.9367	0.9381	0.9406	0.9430	0.9454	0.9478	0.9502	0.9526	0.9551
Sullivan County		60 - 64	0.8841	0.9134	0.9152	0.9182	0.9213	0.9243	0.9273	0.9304	0.9334	0.9364
Sullivan County		65 - 69	0.8042	0.8848	0.8871	0.8909	0.8947	0.8984	0.9022	0.9060	0.9098	0.9135
Sullivan County		70 - 74	0.7081	0.8529	0.8557	0.8604	0.8651	0.8699	0.8746	0.8793	0.8840	0.8888
Sullivan County		75 - 79	0.6385	0.7514	0.7561	0.7639	0.7718	0.7796	0.7874	0.7953	0.8031	0.8109
Sullivan County		80 - 84	0.5555	0.6478	0.6530	0.6617	0.6704	0.6791	0.6878	0.6965	0.7052	0.7139
Sullivan County		85 +	0.4225	0.3339	0.3393	0.3484	0.3575	0.3666	0.3756	0.3847	0.3938	0.4029
Sullivan County	FEMALE	Births	0.9910	0.9878	0.9883	0.9891	0.9898	0.9906	0.9914	0.9921	0.9929	0.9936
Sullivan County		0 - 4	0.9967	0.9974	0.9975	0.9976	0.9978	0.9979	0.9981	0.9982	0.9983	0.9985
Sullivan County		5 - 9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Sullivan County		10 - 14	0.9989	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Sullivan County		15 - 19	0.9977	0.9976	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983
Sullivan County		20 - 24	0.9929	0.9976	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983
Sullivan County		25 - 29	0.9913	0.9976	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982	0.9983
Sullivan County		30 - 34	0.9961	0.9952	0.9953	0.9955	0.9957	0.9958	0.9960	0.9962	0.9964	0.9966
Sullivan County		35 - 39	0.9959	0.9938	0.9940	0.9942	0.9944	0.9947	0.9949	0.9951	0.9954	0.9956
Sullivan County		40 - 44	0.9829	0.9866	0.9869	0.9874	0.9880	0.9885	0.9890	0.9895	0.9900	0.9906
Sullivan County		45 - 49	0.9765	0.9763	0.9769	0.9778	0.9787	0.9797	0.9806	0.9815	0.9825	0.9834
Sullivan County		50 - 54	0.9462	0.9761	0.9767	0.9776	0.9785	0.9795	0.9804	0.9813	0.9823	0.9832
Sullivan County		55 - 59	0.9301	0.9709	0.9715	0.9726	0.9738	0.9749	0.9760	0.9771	0.9782	0.9793
Sullivan County		60 - 64	0.9369	0.9534	0.9544	0.9560	0.9576	0.9593	0.9609	0.9625	0.9642	0.9658
Sullivan County		65 - 69	0.8898	0.9134	0.9151	0.9180	0.9208	0.9236	0.9265	0.9293	0.9322	0.9350
Sullivan County		70 - 74	0.8265	0.8553	0.8581	0.8627	0.8674	0.8720	0.8767	0.8813	0.8860	0.8906
Sullivan County		75 - 79	0.7611	0.7902	0.7941	0.8007	0.8073	0.8140	0.8206	0.8272	0.8338	0.8404
Sullivan County		80 - 84	0.6532	0.6821	0.6868	0.6947	0.7025	0.7104	0.7182	0.7261	0.7339	0.7418
Sullivan County		85 +	0.3528	0.3935	0.3985	0.4068	0.4150	0.4233	0.4316	0.4398	0.4481	0.4564
Ulster County	MALE	Births	0.9952	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994	0.9995
Ulster County		0 - 4	0.9985	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
Ulster County		5 - 9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Ulster County		10 - 14	0.9968	0.9981	0.9981	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9987
Ulster County		15 - 19	0.9940	0.9958	0.9958	0.9960	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969
Ulster County		20 - 24	0.9938	0.9949	0.9950	0.9951	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963
Ulster County		25 - 29	0.9921	0.9933	0.9934	0.9937	0.9939	0.9942	0.9944	0.9947	0.9949	0.9952
Ulster County		30 - 34	0.9881	0.9887	0.9890	0.9894	0.9898	0.9902	0.9907	0.9911	0.9915	0.9919
Ulster County		35 - 39	0.9838	0.9852	0.9855	0.9861	0.9866	0.9872	0.9878	0.9883	0.9889	0.9894
Ulster County		40 - 44	0.9828	0.9853	0.9856	0.9862	0.9868	0.9874	0.9879	0.9885	0.9891	0.9896
Ulster County		45 - 49	0.9703	0.9787	0.9792	0.9801	0.9809	0.9818	0.9826	0.9834	0.9843	0.9851
Ulster County		50 - 54	0.9491	0.9645	0.9653	0.9667	0.9681	0.9695	0.9709	0.9722	0.9736	0.9750
Ulster County		55 - 59	0.9155	0.9553	0.9563	0.9580	0.9597	0.9614	0.9631	0.9648	0.9665	0.9682
Ulster County		60 - 64	0.8853	0.9414	0.9426	0.9447	0.9467	0.9488	0.9508	0.9529	0.9550	0.9570

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Ulster County		65 - 69	0.8382	0.9073	0.9091	0.9122	0.9152	0.9182	0.9213	0.9243	0.9274	0.9304
Ulster County		70 - 74	0.7386	0.8573	0.8600	0.8646	0.8692	0.8738	0.8784	0.8829	0.8875	0.8921
Ulster County		75 - 79	0.6353	0.7699	0.7742	0.7815	0.7887	0.7960	0.8032	0.8105	0.8177	0.8250
Ulster County		80 - 84	0.5540	0.6777	0.6824	0.6904	0.6983	0.7063	0.7143	0.7222	0.7302	0.7381
Ulster County		85 +	0.3726	0.4069	0.4117	0.4198	0.4279	0.4360	0.4441	0.4522	0.4603	0.4684
Ulster County	FEMALE	Births	0.9962	0.9934	0.9936	0.9940	0.9944	0.9949	0.9953	0.9957	0.9961	0.9965
Ulster County		0 - 4	0.9996	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9996
Ulster County		5 - 9	0.9990	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Ulster County		10 - 14	0.9980	0.9989	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992
Ulster County		15 - 19	0.9978	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980
Ulster County		20 - 24	0.9962	0.9973	0.9974	0.9975	0.9976	0.9976	0.9977	0.9978	0.9979	0.9980
Ulster County		25 - 29	0.9946	0.9963	0.9964	0.9966	0.9967	0.9968	0.9970	0.9971	0.9972	0.9974
Ulster County		30 - 34	0.9953	0.9969	0.9970	0.9971	0.9972	0.9973	0.9975	0.9976	0.9977	0.9978
Ulster County		35 - 39	0.9958	0.9968	0.9968	0.9970	0.9971	0.9972	0.9973	0.9975	0.9976	0.9977
Ulster County		40 - 44	0.9927	0.9907	0.9909	0.9913	0.9916	0.9920	0.9923	0.9927	0.9931	0.9934
Ulster County		45 - 49	0.9859	0.9852	0.9856	0.9862	0.9868	0.9873	0.9879	0.9885	0.9891	0.9897
Ulster County		50 - 54	0.9722	0.9814	0.9819	0.9826	0.9833	0.9840	0.9848	0.9855	0.9862	0.9869
Ulster County		55 - 59	0.9491	0.9709	0.9715	0.9727	0.9738	0.9749	0.9760	0.9771	0.9782	0.9793
Ulster County		60 - 64	0.9271	0.9511	0.9521	0.9539	0.9556	0.9573	0.9590	0.9607	0.9624	0.9641
Ulster County		65 - 69	0.8956	0.9126	0.9143	0.9172	0.9201	0.9229	0.9258	0.9287	0.9315	0.9344
Ulster County		70 - 74	0.8428	0.8714	0.8739	0.8780	0.8821	0.8863	0.8904	0.8945	0.8987	0.9028
Ulster County		75 - 79	0.7757	0.8294	0.8326	0.8380	0.8434	0.8488	0.8541	0.8595	0.8649	0.8703
Ulster County		80 - 84	0.6717	0.7278	0.7319	0.7386	0.7453	0.7520	0.7588	0.7655	0.7722	0.7789
Ulster County		85 +	0.3948	0.4727	0.4770	0.4842	0.4914	0.4986	0.5058	0.5130	0.5202	0.5273
Westchester County	MALE	Births	0.9928	0.9959	0.9960	0.9963	0.9965	0.9968	0.9971	0.9973	0.9976	0.9978
Westchester County		0 - 4	0.9983	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9996
Westchester County		5 - 9	0.9988	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997
Westchester County		10 - 14	0.9968	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991
Westchester County		15 - 19	0.9942	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977
Westchester County		20 - 24	0.9936	0.9945	0.9946	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960
Westchester County		25 - 29	0.9925	0.9944	0.9945	0.9947	0.9949	0.9951	0.9954	0.9956	0.9958	0.9960
Westchester County		30 - 34	0.9871	0.9952	0.9953	0.9955	0.9956	0.9958	0.9960	0.9962	0.9964	0.9965
Westchester County		35 - 39	0.9826	0.9934	0.9935	0.9938	0.9940	0.9943	0.9945	0.9948	0.9950	0.9953
Westchester County		40 - 44	0.9794	0.9892	0.9894	0.9898	0.9903	0.9907	0.9911	0.9915	0.9919	0.9924
Westchester County		45 - 49	0.9732	0.9848	0.9852	0.9858	0.9864	0.9870	0.9876	0.9882	0.9888	0.9894
Westchester County		50 - 54	0.9630	0.9766	0.9771	0.9780	0.9789	0.9799	0.9808	0.9817	0.9826	0.9835
Westchester County		55 - 59	0.9405	0.9635	0.9643	0.9657	0.9671	0.9685	0.9699	0.9713	0.9727	0.9741
Westchester County		60 - 64	0.9037	0.9488	0.9498	0.9516	0.9534	0.9552	0.9570	0.9588	0.9606	0.9624
Westchester County		65 - 69	0.8554	0.9182	0.9198	0.9225	0.9252	0.9279	0.9306	0.9332	0.9359	0.9386
Westchester County		70 - 74	0.7888	0.8742	0.8767	0.8807	0.8847	0.8888	0.8928	0.8969	0.9009	0.9049
Westchester County		75 - 79	0.7073	0.8020	0.8058	0.8120	0.8183	0.8245	0.8307	0.8370	0.8432	0.8494
Westchester County		80 - 84	0.6012	0.6991	0.7036	0.7110	0.7184	0.7259	0.7333	0.7407	0.7482	0.7556
Westchester County		85 +	0.3477	0.4047	0.4096	0.4177	0.4258	0.4339	0.4420	0.4502	0.4583	0.4664
Westchester County	FEMALE	Births	0.9937	0.9963	0.9965	0.9967	0.9969	0.9972	0.9974	0.9976	0.9978	0.9981
Westchester County		0 - 4	0.9987	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996
Westchester County		5 - 9	0.9989	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998
Westchester County		10 - 14	0.9986	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9997
Westchester County		15 - 19	0.9989	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Westchester County		20 - 24	0.9979	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990
Westchester County		25 - 29	0.9970	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9990
Westchester County		30 - 34	0.9961	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986
Westchester County		35 - 39	0.9941	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974	0.9975	0.9977	0.9978
Westchester County		40 - 44	0.9905	0.9950	0.9951	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963	0.9965
Westchester County		45 - 49	0.9867	0.9912	0.9914	0.9917	0.9921	0.9924	0.9928	0.9931	0.9935	0.9938
Westchester County		50 - 54	0.9798	0.9855	0.9858	0.9864	0.9870	0.9875	0.9881	0.9886	0.9892	0.9898
Westchester County		55 - 59	0.9661	0.9775	0.9781	0.9789	0.9798	0.9806	0.9815	0.9823	0.9832	0.9841
Westchester County		60 - 64	0.9477	0.9666	0.9673	0.9685	0.9697	0.9708	0.9720	0.9732	0.9744	0.9755
Westchester County		65 - 69	0.9145	0.9463	0.9474	0.9491	0.9509	0.9526	0.9544	0.9562	0.9579	0.9597
Westchester County		70 - 74	0.8617	0.9102	0.9119	0.9148	0.9177	0.9206	0.9234	0.9263	0.9292	0.9321
Westchester County		75 - 79	0.7868	0.8520	0.8548	0.8595	0.8641	0.8688	0.8735	0.8781	0.8828	0.8874
Westchester County		80 - 84	0.6936	0.7593	0.7628	0.7688	0.7747	0.7807	0.7866	0.7926	0.7985	0.8044
Westchester County		85 +	0.4386	0.4853	0.4895	0.4965	0.5036	0.5106	0.5176	0.5246	0.5316	0.5387
New Jersey	MALE	Births	0.9909	0.9953	0.9955	0.9958	0.9961	0.9964	0.9967	0.9970	0.9973	0.9976
New Jersey		0 - 4	0.9977	0.9989	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9993
New Jersey		5 - 9	0.9989	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
New Jersey		10 - 14	0.9975	0.9985	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9989	0.9989
New Jersey		15 - 19	0.9951	0.9961	0.9961	0.9963	0.9964	0.9966	0.9967	0.9968	0.9970	0.9971
New Jersey		20 - 24	0.9931	0.9947	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962
New Jersey		25 - 29	0.9899	0.9949	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9961	0.9963
New Jersey		30 - 34	0.9854	0.9941	0.9942	0.9945	0.9947	0.9949	0.9951	0.9953	0.9956	0.9958
New Jersey		35 - 39	0.9826	0.9921	0.9923	0.9926	0.9929	0.9932	0.9935	0.9938	0.9940	0.9943
New Jersey		40 - 44	0.9796	0.9872	0.9875	0.9880	0.9885	0.9890	0.9895	0.9900	0.9905	0.9910
New Jersey		45 - 49	0.9714	0.9800	0.9804	0.9812	0.9820	0.9828	0.9836	0.9844	0.9852	0.9860
New Jersey		50 - 54	0.9557	0.9702	0.9709	0.9721	0.9732	0.9744	0.9756	0.9767	0.9779	0.9790
New Jersey		55 - 59	0.9316	0.9561	0.9571	0.9588	0.9605	0.9621	0.9638	0.9655	0.9672	0.9688
New Jersey		60 - 64	0.8951	0.9350	0.9364	0.9386	0.9409	0.9432	0.9455	0.9477	0.9500	0.9523
New Jersey		65 - 69	0.8437	0.9018	0.9037	0.9069	0.9101	0.9134	0.9166	0.9198	0.9230	0.9263
New Jersey	FEMALE	70 - 74	0.7704	0.8484	0.8513	0.8562	0.8611	0.8659	0.8708	0.8757	0.8805	0.8854
New Jersey		75 - 79	0.6694	0.7624	0.7669	0.7744	0.7819	0.7894	0.7969	0.8043	0.8118	0.8193
New Jersey		80 - 84	0.5733	0.6624	0.6674	0.6757	0.6840	0.6924	0.7007	0.7090	0.7174	0.7257
New Jersey		85 +	0.3441	0.3781	0.3832	0.3917	0.4002	0.4086	0.4171	0.4256	0.4341	0.4426
New Jersey		Births	0.9923	0.9966	0.9967	0.9969	0.9971	0.9973	0.9976	0.9978	0.9980	0.9982
New Jersey		0 - 4	0.9979	0.9992	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995
New Jersey		5 - 9	0.9992	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9998
New Jersey		10 - 14	0.9987	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995
New Jersey		15 - 19	0.9978	0.9987	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991
New Jersey		20 - 24	0.9970	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986
New Jersey		25 - 29	0.9955	0.9976	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982	0.9983
New Jersey		30 - 34	0.9935	0.9967	0.9968	0.9969	0.9970	0.9971	0.9973	0.9974	0.9975	0.9976
New Jersey		35 - 39	0.9921	0.9951	0.9952	0.9954	0.9956	0.9958	0.9960	0.9961	0.9963	0.9965
New Jersey		40 - 44	0.9899	0.9924	0.9926	0.9929	0.9932	0.9935	0.9938	0.9941	0.9943	0.9946
New Jersey		45 - 49	0.9843	0.9887	0.9890	0.9894	0.9899	0.9903	0.9907	0.9912	0.9916	0.9921
New Jersey		50 - 54	0.9743	0.9821	0.9825	0.9832	0.9839	0.9846	0.9853	0.9860	0.9867	0.9874
New Jersey		55 - 59	0.9587	0.9727	0.9733	0.9743	0.9754	0.9764	0.9775	0.9785	0.9796	0.9806
New Jersey		60 - 64	0.9366	0.9594	0.9603	0.9617	0.9631	0.9645	0.9660	0.9674	0.9688	0.9702
New Jersey		65 - 69	0.9033	0.9349	0.9362	0.9383	0.9404	0.9426	0.9447	0.9468	0.9490	0.9511

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
New Jersey		70 - 74	0.8541	0.8940	0.8961	0.8995	0.9029	0.9063	0.9097	0.9131	0.9165	0.9199
New Jersey		75 - 79	0.7766	0.8291	0.8324	0.8378	0.8431	0.8485	0.8539	0.8593	0.8647	0.8701
New Jersey		80 - 84	0.6748	0.7279	0.7319	0.7386	0.7453	0.7521	0.7588	0.7655	0.7722	0.7789
New Jersey		85 +	0.3951	0.4324	0.4370	0.4448	0.4525	0.4602	0.4680	0.4757	0.4835	0.4912
Bergen County	MALE	Births	0.9926	0.9983	0.9984	0.9985	0.9986	0.9987	0.9988	0.9989	0.9990	0.9991
Bergen County		0 - 4	0.9979	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998
Bergen County		5 - 9	0.9992	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997
Bergen County		10 - 14	0.9987	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993
Bergen County		15 - 19	0.9971	0.9969	0.9969	0.9970	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977
Bergen County		20 - 24	0.9951	0.9960	0.9960	0.9962	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971
Bergen County		25 - 29	0.9923	0.9963	0.9964	0.9966	0.9967	0.9968	0.9970	0.9971	0.9972	0.9974
Bergen County		30 - 34	0.9903	0.9958	0.9959	0.9960	0.9962	0.9964	0.9965	0.9967	0.9968	0.9970
Bergen County		35 - 39	0.9887	0.9954	0.9955	0.9957	0.9958	0.9960	0.9962	0.9964	0.9965	0.9967
Bergen County		40 - 44	0.9865	0.9916	0.9918	0.9921	0.9924	0.9928	0.9931	0.9934	0.9937	0.9941
Bergen County		45 - 49	0.9816	0.9843	0.9847	0.9853	0.9859	0.9866	0.9872	0.9878	0.9884	0.9890
Bergen County		50 - 54	0.9696	0.9765	0.9770	0.9779	0.9789	0.9798	0.9807	0.9816	0.9825	0.9834
Bergen County		55 - 59	0.9448	0.9671	0.9679	0.9691	0.9704	0.9716	0.9729	0.9741	0.9754	0.9766
Bergen County		60 - 64	0.9082	0.9491	0.9502	0.9520	0.9537	0.9555	0.9573	0.9591	0.9609	0.9626
Bergen County		65 - 69	0.8607	0.9255	0.9270	0.9294	0.9319	0.9343	0.9367	0.9392	0.9416	0.9441
Bergen County		70 - 74	0.7827	0.8739	0.8763	0.8804	0.8844	0.8885	0.8925	0.8966	0.9006	0.9047
Bergen County		75 - 79	0.6857	0.7868	0.7908	0.7975	0.8042	0.8110	0.8177	0.8244	0.8311	0.8378
Bergen County		80 - 84	0.5829	0.6876	0.6923	0.7000	0.7077	0.7154	0.7231	0.7308	0.7385	0.7462
Bergen County		85 +	0.3387	0.3884	0.3934	0.4018	0.4101	0.4185	0.4268	0.4351	0.4435	0.4518
Bergen County	FEMALE	Births	0.9957	0.9985	0.9985	0.9986	0.9987	0.9988	0.9989	0.9990	0.9991	0.9992
Bergen County		0 - 4	0.9991	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998
Bergen County		5 - 9	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
Bergen County		10 - 14	0.9991	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997
Bergen County		15 - 19	0.9985	0.9989	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992
Bergen County		20 - 24	0.9981	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	0.9981	0.9982	0.9983
Bergen County		25 - 29	0.9968	0.9976	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983
Bergen County		30 - 34	0.9963	0.9975	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982
Bergen County		35 - 39	0.9955	0.9960	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969	0.9970	0.9972
Bergen County		40 - 44	0.9929	0.9940	0.9941	0.9944	0.9946	0.9948	0.9951	0.9953	0.9955	0.9958
Bergen County		45 - 49	0.9870	0.9914	0.9916	0.9919	0.9923	0.9926	0.9930	0.9933	0.9936	0.9940
Bergen County		50 - 54	0.9771	0.9861	0.9864	0.9870	0.9875	0.9881	0.9886	0.9891	0.9897	0.9902
Bergen County		55 - 59	0.9652	0.9778	0.9783	0.9792	0.9800	0.9809	0.9817	0.9826	0.9834	0.9843
Bergen County		60 - 64	0.9430	0.9661	0.9668	0.9680	0.9691	0.9703	0.9715	0.9727	0.9739	0.9751
Bergen County		65 - 69	0.9081	0.9484	0.9494	0.9511	0.9528	0.9545	0.9562	0.9579	0.9596	0.9613
Bergen County		70 - 74	0.8609	0.9113	0.9130	0.9158	0.9187	0.9215	0.9244	0.9272	0.9301	0.9329
Bergen County		75 - 79	0.7859	0.8490	0.8519	0.8566	0.8614	0.8661	0.8709	0.8757	0.8804	0.8852
Bergen County		80 - 84	0.6817	0.7459	0.7496	0.7559	0.7622	0.7684	0.7747	0.7810	0.7873	0.7935
Bergen County		85 +	0.3942	0.4356	0.4402	0.4479	0.4556	0.4633	0.4710	0.4787	0.4864	0.4941
Essex County	MALE	Births	0.9870	0.9926	0.9929	0.9933	0.9938	0.9943	0.9947	0.9952	0.9957	0.9961
Essex County		0 - 4	0.9963	0.9986	0.9986	0.9987	0.9988	0.9989	0.9989	0.9990	0.9991	0.9992
Essex County		5 - 9	0.9980	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998
Essex County		10 - 14	0.9958	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981
Essex County		15 - 19	0.9920	0.9931	0.9932	0.9935	0.9937	0.9940	0.9942	0.9945	0.9947	0.9949
Essex County		20 - 24	0.9867	0.9915	0.9917	0.9920	0.9923	0.9926	0.9929	0.9933	0.9936	0.9939

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Essex County		25 - 29	0.9790	0.9919	0.9921	0.9924	0.9927	0.9930	0.9933	0.9936	0.9939	0.9942
Essex County		30 - 34	0.9686	0.9907	0.9909	0.9913	0.9916	0.9920	0.9923	0.9927	0.9930	0.9934
Essex County		35 - 39	0.9641	0.9882	0.9885	0.9889	0.9894	0.9898	0.9903	0.9907	0.9912	0.9916
Essex County		40 - 44	0.9604	0.9824	0.9828	0.9835	0.9842	0.9848	0.9855	0.9862	0.9869	0.9876
Essex County		45 - 49	0.9497	0.9726	0.9732	0.9743	0.9754	0.9765	0.9776	0.9786	0.9797	0.9808
Essex County		50 - 54	0.9340	0.9582	0.9592	0.9608	0.9624	0.9640	0.9657	0.9673	0.9689	0.9706
Essex County		55 - 59	0.9120	0.9410	0.9423	0.9446	0.9468	0.9491	0.9513	0.9536	0.9558	0.9581
Essex County		60 - 64	0.8786	0.9224	0.9240	0.9268	0.9295	0.9322	0.9349	0.9376	0.9403	0.9431
Essex County		65 - 69	0.8330	0.8821	0.8844	0.8883	0.8922	0.8960	0.8999	0.9038	0.9076	0.9115
Essex County		70 - 74	0.7646	0.8197	0.8232	0.8290	0.8348	0.8406	0.8464	0.8521	0.8579	0.8637
Essex County		75 - 79	0.6575	0.7485	0.7532	0.7612	0.7691	0.7770	0.7849	0.7929	0.8008	0.8087
Essex County		80 - 84	0.5711	0.6480	0.6532	0.6619	0.6706	0.6793	0.6880	0.6967	0.7054	0.7141
Essex County		85 +	0.3534	0.3856	0.3906	0.3990	0.4074	0.4158	0.4242	0.4325	0.4409	0.4493
Essex County	FEMALE	Births	0.9862	0.9944	0.9946	0.9949	0.9953	0.9956	0.9960	0.9963	0.9967	0.9970
Essex County		0 - 4	0.9958	0.9985	0.9985	0.9986	0.9987	0.9988	0.9989	0.9989	0.9990	0.9991
Essex County		5 - 9	0.9987	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997
Essex County		10 - 14	0.9980	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995
Essex County		15 - 19	0.9958	0.9987	0.9987	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990
Essex County		20 - 24	0.9934	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	0.9981	0.9982	0.9983
Essex County		25 - 29	0.9900	0.9961	0.9962	0.9964	0.9965	0.9967	0.9968	0.9969	0.9971	0.9972
Essex County		30 - 34	0.9852	0.9947	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962
Essex County		35 - 39	0.9823	0.9920	0.9922	0.9925	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943
Essex County		40 - 44	0.9814	0.9893	0.9895	0.9900	0.9904	0.9908	0.9912	0.9916	0.9920	0.9925
Essex County		45 - 49	0.9760	0.9834	0.9838	0.9845	0.9851	0.9858	0.9864	0.9871	0.9877	0.9884
Essex County		50 - 54	0.9629	0.9745	0.9751	0.9761	0.9771	0.9781	0.9791	0.9801	0.9811	0.9820
Essex County		55 - 59	0.9460	0.9659	0.9667	0.9680	0.9693	0.9706	0.9719	0.9732	0.9745	0.9758
Essex County		60 - 64	0.9238	0.9532	0.9542	0.9558	0.9575	0.9591	0.9607	0.9624	0.9640	0.9657
Essex County		65 - 69	0.8911	0.9231	0.9246	0.9272	0.9297	0.9322	0.9347	0.9372	0.9398	0.9423
Essex County		70 - 74	0.8465	0.8778	0.8801	0.8841	0.8880	0.8919	0.8958	0.8998	0.9037	0.9076
Essex County		75 - 79	0.7752	0.8122	0.8157	0.8216	0.8276	0.8335	0.8394	0.8453	0.8512	0.8572
Essex County		80 - 84	0.6731	0.7206	0.7247	0.7316	0.7385	0.7454	0.7523	0.7592	0.7661	0.7730
Essex County		85 +	0.3980	0.4612	0.4656	0.4729	0.4803	0.4876	0.4950	0.5023	0.5097	0.5170
Hudson County	MALE	Births	0.9875	0.9961	0.9962	0.9965	0.9967	0.9970	0.9972	0.9974	0.9977	0.9979
Hudson County		0 - 4	0.9970	0.9988	0.9988	0.9989	0.9989	0.9990	0.9991	0.9991	0.9992	0.9993
Hudson County		5 - 9	0.9982	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
Hudson County		10 - 14	0.9971	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9988	0.9988	0.9989
Hudson County		15 - 19	0.9953	0.9967	0.9967	0.9968	0.9970	0.9971	0.9972	0.9973	0.9974	0.9976
Hudson County		20 - 24	0.9922	0.9961	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969	0.9970	0.9971
Hudson County		25 - 29	0.9846	0.9963	0.9964	0.9965	0.9966	0.9968	0.9969	0.9971	0.9972	0.9973
Hudson County		30 - 34	0.9757	0.9944	0.9945	0.9947	0.9949	0.9951	0.9954	0.9956	0.9958	0.9960
Hudson County		35 - 39	0.9715	0.9920	0.9922	0.9925	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943
Hudson County		40 - 44	0.9680	0.9853	0.9856	0.9862	0.9868	0.9873	0.9879	0.9885	0.9891	0.9896
Hudson County		45 - 49	0.9583	0.9734	0.9741	0.9751	0.9762	0.9772	0.9783	0.9793	0.9804	0.9814
Hudson County		50 - 54	0.9435	0.9619	0.9627	0.9642	0.9657	0.9672	0.9687	0.9702	0.9717	0.9731
Hudson County		55 - 59	0.9190	0.9481	0.9493	0.9513	0.9533	0.9553	0.9572	0.9592	0.9612	0.9632
Hudson County		60 - 64	0.8767	0.9260	0.9275	0.9301	0.9327	0.9353	0.9379	0.9405	0.9431	0.9457
Hudson County		65 - 69	0.8151	0.8875	0.8898	0.8935	0.8971	0.9008	0.9045	0.9082	0.9119	0.9156
Hudson County		70 - 74	0.7435	0.8408	0.8438	0.8490	0.8541	0.8592	0.8643	0.8694	0.8745	0.8796

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Hudson County		75 - 79	0.6539	0.7540	0.7586	0.7664	0.7741	0.7819	0.7896	0.7974	0.8051	0.8129
Hudson County		80 - 84	0.5677	0.6711	0.6759	0.6841	0.6922	0.7003	0.7084	0.7165	0.7247	0.7328
Hudson County		85 +	0.3946	0.4356	0.4402	0.4479	0.4556	0.4633	0.4710	0.4787	0.4864	0.4941
Hudson County	FEMALE	Births	0.9915	0.9969	0.9970	0.9972	0.9974	0.9976	0.9978	0.9980	0.9982	0.9984
Hudson County		0 - 4	0.9969	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9995
Hudson County		5 - 9	0.9991	0.9995	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997
Hudson County		10 - 14	0.9991	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
Hudson County		15 - 19	0.9975	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
Hudson County		20 - 24	0.9957	0.9989	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992
Hudson County		25 - 29	0.9931	0.9983	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9988
Hudson County		30 - 34	0.9908	0.9979	0.9979	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985
Hudson County		35 - 39	0.9902	0.9952	0.9953	0.9955	0.9957	0.9958	0.9960	0.9962	0.9964	0.9966
Hudson County		40 - 44	0.9867	0.9910	0.9912	0.9916	0.9919	0.9923	0.9926	0.9930	0.9933	0.9937
Hudson County		45 - 49	0.9810	0.9882	0.9885	0.9889	0.9894	0.9899	0.9903	0.9908	0.9913	0.9917
Hudson County		50 - 54	0.9714	0.9799	0.9804	0.9812	0.9820	0.9828	0.9835	0.9843	0.9851	0.9859
Hudson County		55 - 59	0.9515	0.9684	0.9691	0.9703	0.9716	0.9728	0.9740	0.9752	0.9764	0.9776
Hudson County		60 - 64	0.9286	0.9544	0.9553	0.9569	0.9585	0.9601	0.9617	0.9633	0.9649	0.9665
Hudson County		65 - 69	0.8924	0.9308	0.9322	0.9344	0.9367	0.9390	0.9412	0.9435	0.9458	0.9481
Hudson County		70 - 74	0.8426	0.8920	0.8941	0.8975	0.9010	0.9045	0.9079	0.9114	0.9149	0.9183
Hudson County		75 - 79	0.7671	0.8246	0.8280	0.8335	0.8390	0.8445	0.8501	0.8556	0.8611	0.8666
Hudson County		80 - 84	0.6590	0.7337	0.7376	0.7442	0.7508	0.7574	0.7639	0.7705	0.7771	0.7837
Hudson County		85 +	0.3689	0.4653	0.4697	0.4770	0.4843	0.4916	0.4988	0.5061	0.5134	0.5207
Hunterdon County	MALE	Births	0.9935	0.9976	0.9977	0.9978	0.9980	0.9981	0.9983	0.9984	0.9986	0.9987
Hunterdon County		0 - 4	0.9986	0.9989	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9994
Hunterdon County		5 - 9	0.9993	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Hunterdon County		10 - 14	0.9950	0.9984	0.9985	0.9985	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989
Hunterdon County		15 - 19	0.9930	0.9964	0.9965	0.9966	0.9967	0.9969	0.9970	0.9971	0.9972	0.9974
Hunterdon County		20 - 24	0.9955	0.9960	0.9961	0.9963	0.9964	0.9965	0.9967	0.9968	0.9970	0.9971
Hunterdon County		25 - 29	0.9962	0.9950	0.9952	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963	0.9964
Hunterdon County		30 - 34	0.9954	0.9955	0.9956	0.9957	0.9959	0.9961	0.9962	0.9964	0.9966	0.9967
Hunterdon County		35 - 39	0.9936	0.9949	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962	0.9964
Hunterdon County		40 - 44	0.9881	0.9920	0.9922	0.9925	0.9928	0.9931	0.9934	0.9937	0.9941	0.9944
Hunterdon County		45 - 49	0.9871	0.9862	0.9865	0.9871	0.9876	0.9881	0.9887	0.9892	0.9898	0.9903
Hunterdon County		50 - 54	0.9712	0.9800	0.9805	0.9813	0.9821	0.9828	0.9836	0.9844	0.9852	0.9859
Hunterdon County		55 - 59	0.9354	0.9709	0.9715	0.9726	0.9737	0.9749	0.9760	0.9771	0.9782	0.9793
Hunterdon County		60 - 64	0.8982	0.9422	0.9434	0.9455	0.9475	0.9495	0.9515	0.9536	0.9556	0.9576
Hunterdon County		65 - 69	0.8508	0.8962	0.8983	0.9017	0.9051	0.9085	0.9119	0.9153	0.9187	0.9221
Hunterdon County		70 - 74	0.7752	0.8452	0.8482	0.8532	0.8582	0.8631	0.8681	0.8731	0.8780	0.8830
Hunterdon County		75 - 79	0.6614	0.7769	0.7811	0.7881	0.7951	0.8022	0.8092	0.8162	0.8233	0.8303
Hunterdon County		80 - 84	0.5531	0.6520	0.6571	0.6657	0.6743	0.6829	0.6915	0.7001	0.7087	0.7173
Hunterdon County		85 +	0.2784	0.3279	0.3334	0.3425	0.3517	0.3609	0.3700	0.3792	0.3884	0.3975
Hunterdon County	FEMALE	Births	0.9951	0.9981	0.9981	0.9983	0.9984	0.9985	0.9986	0.9987	0.9989	0.9990
Hunterdon County		0 - 4	0.9995	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995
Hunterdon County		5 - 9	1.0000	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
Hunterdon County		10 - 14	0.9992	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991
Hunterdon County		15 - 19	0.9984	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990	0.9991
Hunterdon County		20 - 24	0.9992	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Hunterdon County		25 - 29	0.9990	0.9982	0.9982	0.9983	0.9983	0.9984	0.9985	0.9986	0.9986	0.9987

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Hunterdon County		30 - 34	0.9976	0.9969	0.9969	0.9971	0.9972	0.9973	0.9974	0.9975	0.9976	0.9978
Hunterdon County		35 - 39	0.9971	0.9983	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9988
Hunterdon County		40 - 44	0.9944	0.9958	0.9959	0.9961	0.9963	0.9964	0.9966	0.9967	0.9969	0.9971
Hunterdon County		45 - 49	0.9914	0.9917	0.9919	0.9922	0.9925	0.9928	0.9932	0.9935	0.9938	0.9942
Hunterdon County		50 - 54	0.9807	0.9881	0.9884	0.9889	0.9893	0.9898	0.9902	0.9907	0.9912	0.9916
Hunterdon County		55 - 59	0.9643	0.9818	0.9822	0.9829	0.9836	0.9843	0.9850	0.9857	0.9864	0.9871
Hunterdon County		60 - 64	0.9462	0.9716	0.9722	0.9732	0.9742	0.9752	0.9762	0.9772	0.9782	0.9792
Hunterdon County		65 - 69	0.9052	0.9469	0.9479	0.9497	0.9514	0.9532	0.9549	0.9566	0.9584	0.9601
Hunterdon County		70 - 74	0.8580	0.9079	0.9097	0.9126	0.9156	0.9186	0.9215	0.9245	0.9274	0.9304
Hunterdon County		75 - 79	0.7831	0.8186	0.8220	0.8277	0.8334	0.8391	0.8449	0.8506	0.8563	0.8620
Hunterdon County		80 - 84	0.6784	0.7185	0.7227	0.7296	0.7366	0.7435	0.7505	0.7574	0.7644	0.7713
Hunterdon County		85 +	0.3954	0.4020	0.4069	0.4151	0.4232	0.4314	0.4395	0.4477	0.4558	0.4640
Mercer County	MALE	Births	0.9889	0.9893	0.9897	0.9903	0.9910	0.9917	0.9924	0.9930	0.9937	0.9944
Mercer County		0 - 4	0.9973	0.9976	0.9977	0.9978	0.9980	0.9981	0.9982	0.9984	0.9985	0.9986
Mercer County		5 - 9	0.9990	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996
Mercer County		10 - 14	0.9977	0.9989	0.9989	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992
Mercer County		15 - 19	0.9962	0.9956	0.9957	0.9958	0.9960	0.9961	0.9963	0.9965	0.9966	0.9968
Mercer County		20 - 24	0.9953	0.9941	0.9942	0.9944	0.9946	0.9948	0.9951	0.9953	0.9955	0.9957
Mercer County		25 - 29	0.9925	0.9955	0.9956	0.9957	0.9959	0.9961	0.9962	0.9964	0.9966	0.9967
Mercer County		30 - 34	0.9885	0.9947	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962
Mercer County		35 - 39	0.9822	0.9920	0.9922	0.9925	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943
Mercer County		40 - 44	0.9765	0.9860	0.9863	0.9869	0.9874	0.9880	0.9885	0.9890	0.9896	0.9901
Mercer County		45 - 49	0.9693	0.9765	0.9771	0.9780	0.9789	0.9798	0.9808	0.9817	0.9826	0.9835
Mercer County		50 - 54	0.9528	0.9654	0.9662	0.9675	0.9689	0.9702	0.9716	0.9729	0.9743	0.9756
Mercer County		55 - 59	0.9254	0.9482	0.9494	0.9514	0.9533	0.9553	0.9573	0.9593	0.9612	0.9632
Mercer County		60 - 64	0.8900	0.9306	0.9321	0.9345	0.9369	0.9394	0.9418	0.9442	0.9467	0.9491
Mercer County		65 - 69	0.8279	0.9064	0.9082	0.9113	0.9143	0.9174	0.9205	0.9236	0.9266	0.9297
Mercer County		70 - 74	0.7554	0.8470	0.8500	0.8549	0.8598	0.8647	0.8696	0.8746	0.8795	0.8844
Mercer County		75 - 79	0.6798	0.7504	0.7551	0.7630	0.7708	0.7787	0.7866	0.7944	0.8023	0.8102
Mercer County		80 - 84	0.5767	0.6570	0.6621	0.6706	0.6790	0.6875	0.6960	0.7044	0.7129	0.7214
Mercer County		85 +	0.3550	0.3752	0.3803	0.3888	0.3973	0.4058	0.4144	0.4229	0.4314	0.4399
Mercer County	FEMALE	Births	0.9901	0.9949	0.9951	0.9954	0.9957	0.9960	0.9963	0.9967	0.9970	0.9973
Mercer County		0 - 4	0.9981	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
Mercer County		5 - 9	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999
Mercer County		10 - 14	0.9989	0.9992	0.9993	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994	0.9995
Mercer County		15 - 19	0.9982	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989
Mercer County		20 - 24	0.9985	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987
Mercer County		25 - 29	0.9970	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
Mercer County		30 - 34	0.9941	0.9961	0.9962	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971	0.9972
Mercer County		35 - 39	0.9917	0.9945	0.9946	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9961
Mercer County		40 - 44	0.9888	0.9912	0.9914	0.9917	0.9921	0.9924	0.9928	0.9931	0.9935	0.9938
Mercer County		45 - 49	0.9826	0.9862	0.9865	0.9870	0.9876	0.9881	0.9887	0.9892	0.9898	0.9903
Mercer County		50 - 54	0.9719	0.9798	0.9803	0.9810	0.9818	0.9826	0.9834	0.9842	0.9850	0.9858
Mercer County		55 - 59	0.9562	0.9697	0.9704	0.9716	0.9727	0.9739	0.9750	0.9762	0.9773	0.9785
Mercer County		60 - 64	0.9377	0.9548	0.9557	0.9573	0.9589	0.9605	0.9621	0.9637	0.9652	0.9668
Mercer County		65 - 69	0.9064	0.9271	0.9286	0.9310	0.9334	0.9357	0.9381	0.9405	0.9429	0.9453
Mercer County		70 - 74	0.8591	0.8848	0.8870	0.8907	0.8944	0.8981	0.9018	0.9055	0.9092	0.9129
Mercer County		75 - 79	0.7819	0.8251	0.8284	0.8339	0.8394	0.8449	0.8504	0.8559	0.8614	0.8670

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Mercer County		80 - 84	0.6781	0.7249	0.7289	0.7357	0.7425	0.7493	0.7561	0.7629	0.7697	0.7765
Mercer County		85 +	0.3836	0.4425	0.4470	0.4546	0.4622	0.4698	0.4774	0.4850	0.4926	0.5002
Middlesex County	MALE	Births	0.9910	0.9938	0.9940	0.9944	0.9948	0.9952	0.9956	0.9960	0.9964	0.9968
Middlesex County		0 - 4	0.9985	0.9985	0.9985	0.9986	0.9987	0.9988	0.9989	0.9989	0.9990	0.9991
Middlesex County		5 - 9	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
Middlesex County		10 - 14	0.9982	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993
Middlesex County		15 - 19	0.9964	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985
Middlesex County		20 - 24	0.9945	0.9964	0.9965	0.9966	0.9967	0.9969	0.9970	0.9971	0.9973	0.9974
Middlesex County		25 - 29	0.9919	0.9955	0.9956	0.9958	0.9960	0.9961	0.9963	0.9965	0.9966	0.9968
Middlesex County		30 - 34	0.9894	0.9953	0.9954	0.9956	0.9958	0.9960	0.9961	0.9963	0.9965	0.9967
Middlesex County		35 - 39	0.9859	0.9933	0.9935	0.9937	0.9940	0.9942	0.9945	0.9947	0.9950	0.9952
Middlesex County		40 - 44	0.9823	0.9874	0.9877	0.9882	0.9887	0.9892	0.9897	0.9901	0.9906	0.9911
Middlesex County		45 - 49	0.9744	0.9829	0.9833	0.9840	0.9847	0.9853	0.9860	0.9867	0.9874	0.9880
Middlesex County		50 - 54	0.9545	0.9744	0.9750	0.9760	0.9770	0.9780	0.9790	0.9800	0.9810	0.9820
Middlesex County		55 - 59	0.9337	0.9568	0.9577	0.9594	0.9610	0.9627	0.9643	0.9660	0.9676	0.9693
Middlesex County		60 - 64	0.8964	0.9363	0.9377	0.9399	0.9421	0.9444	0.9466	0.9488	0.9510	0.9533
Middlesex County		65 - 69	0.8411	0.9078	0.9096	0.9127	0.9157	0.9187	0.9217	0.9248	0.9278	0.9308
Middlesex County		70 - 74	0.7590	0.8521	0.8550	0.8597	0.8645	0.8692	0.8740	0.8787	0.8835	0.8882
Middlesex County		75 - 79	0.6520	0.7548	0.7595	0.7672	0.7749	0.7827	0.7904	0.7981	0.8058	0.8136
Middlesex County		80 - 84	0.5594	0.6624	0.6674	0.6757	0.6841	0.6924	0.7007	0.7091	0.7174	0.7257
Middlesex County		85 +	0.3441	0.3909	0.3958	0.4041	0.4125	0.4208	0.4291	0.4374	0.4457	0.4540
Middlesex County	FEMALE	Births	0.9935	0.9973	0.9974	0.9976	0.9978	0.9979	0.9981	0.9983	0.9984	0.9986
Middlesex County		0 - 4	0.9985	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
Middlesex County		5 - 9	0.9991	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999
Middlesex County		10 - 14	0.9991	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999
Middlesex County		15 - 19	0.9989	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994	0.9994
Middlesex County		20 - 24	0.9985	0.9985	0.9985	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989
Middlesex County		25 - 29	0.9977	0.9981	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986
Middlesex County		30 - 34	0.9964	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980
Middlesex County		35 - 39	0.9950	0.9963	0.9963	0.9965	0.9966	0.9968	0.9969	0.9970	0.9972	0.9973
Middlesex County		40 - 44	0.9926	0.9929	0.9931	0.9933	0.9936	0.9939	0.9942	0.9944	0.9947	0.9950
Middlesex County		45 - 49	0.9865	0.9891	0.9894	0.9898	0.9903	0.9907	0.9911	0.9915	0.9920	0.9924
Middlesex County		50 - 54	0.9756	0.9823	0.9827	0.9834	0.9841	0.9848	0.9854	0.9861	0.9868	0.9875
Middlesex County		55 - 59	0.9588	0.9728	0.9734	0.9745	0.9755	0.9765	0.9776	0.9786	0.9797	0.9807
Middlesex County		60 - 64	0.9341	0.9598	0.9607	0.9621	0.9635	0.9649	0.9663	0.9677	0.9691	0.9705
Middlesex County		65 - 69	0.9037	0.9368	0.9380	0.9401	0.9422	0.9443	0.9463	0.9484	0.9505	0.9525
Middlesex County		70 - 74	0.8492	0.8992	0.9011	0.9043	0.9076	0.9108	0.9140	0.9173	0.9205	0.9238
Middlesex County		75 - 79	0.7655	0.8335	0.8367	0.8419	0.8472	0.8524	0.8577	0.8629	0.8682	0.8734
Middlesex County		80 - 84	0.6619	0.7301	0.7341	0.7407	0.7474	0.7541	0.7607	0.7674	0.7741	0.7807
Middlesex County		85 +	0.3730	0.4228	0.4275	0.4354	0.4433	0.4512	0.4590	0.4669	0.4748	0.4826
Monmouth County	MALE	Births	0.9918	0.9955	0.9957	0.9960	0.9963	0.9965	0.9968	0.9971	0.9974	0.9977
Monmouth County		0 - 4	0.9977	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994	0.9995
Monmouth County		5 - 9	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9998
Monmouth County		10 - 14	0.9980	0.9980	0.9981	0.9982	0.9982	0.9983	0.9984	0.9985	0.9985	0.9986
Monmouth County		15 - 19	0.9952	0.9958	0.9959	0.9961	0.9962	0.9964	0.9965	0.9967	0.9968	0.9969
Monmouth County		20 - 24	0.9934	0.9940	0.9942	0.9944	0.9946	0.9948	0.9950	0.9952	0.9954	0.9957
Monmouth County		25 - 29	0.9918	0.9930	0.9931	0.9934	0.9936	0.9939	0.9942	0.9944	0.9947	0.9950
Monmouth County		30 - 34	0.9879	0.9933	0.9935	0.9937	0.9940	0.9942	0.9945	0.9947	0.9950	0.9952

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Monmouth County		35 - 39	0.9861	0.9924	0.9925	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943	0.9946
Monmouth County		40 - 44	0.9849	0.9883	0.9886	0.9890	0.9895	0.9899	0.9904	0.9909	0.9913	0.9918
Monmouth County		45 - 49	0.9761	0.9826	0.9830	0.9837	0.9844	0.9851	0.9857	0.9864	0.9871	0.9878
Monmouth County		50 - 54	0.9574	0.9736	0.9742	0.9752	0.9762	0.9773	0.9783	0.9793	0.9804	0.9814
Monmouth County		55 - 59	0.9284	0.9576	0.9586	0.9602	0.9618	0.9635	0.9651	0.9667	0.9683	0.9699
Monmouth County		60 - 64	0.8929	0.9338	0.9352	0.9375	0.9398	0.9421	0.9445	0.9468	0.9491	0.9514
Monmouth County		65 - 69	0.8410	0.9003	0.9023	0.9056	0.9088	0.9121	0.9154	0.9186	0.9219	0.9252
Monmouth County		70 - 74	0.7599	0.8365	0.8396	0.8449	0.8501	0.8554	0.8606	0.8659	0.8712	0.8764
Monmouth County		75 - 79	0.6596	0.7424	0.7473	0.7554	0.7635	0.7716	0.7797	0.7878	0.7960	0.8041
Monmouth County		80 - 84	0.5620	0.6397	0.6450	0.6539	0.6628	0.6717	0.6806	0.6895	0.6984	0.7073
Monmouth County		85 +	0.3362	0.3542	0.3595	0.3683	0.3771	0.3859	0.3947	0.4035	0.4123	0.4212
Monmouth County	FEMALE	Births	0.9921	0.9967	0.9969	0.9971	0.9973	0.9975	0.9977	0.9979	0.9981	0.9983
Monmouth County		0 - 4	0.9973	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995	0.9996
Monmouth County		5 - 9	0.9990	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997
Monmouth County		10 - 14	0.9991	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
Monmouth County		15 - 19	0.9987	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994
Monmouth County		20 - 24	0.9983	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984
Monmouth County		25 - 29	0.9966	0.9975	0.9976	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981	0.9982
Monmouth County		30 - 34	0.9947	0.9971	0.9971	0.9972	0.9973	0.9974	0.9976	0.9977	0.9978	0.9979
Monmouth County		35 - 39	0.9932	0.9958	0.9959	0.9961	0.9962	0.9964	0.9965	0.9967	0.9969	0.9970
Monmouth County		40 - 44	0.9903	0.9941	0.9943	0.9945	0.9947	0.9949	0.9952	0.9954	0.9956	0.9959
Monmouth County		45 - 49	0.9858	0.9904	0.9906	0.9910	0.9914	0.9918	0.9922	0.9925	0.9929	0.9933
Monmouth County		50 - 54	0.9756	0.9844	0.9848	0.9854	0.9860	0.9866	0.9872	0.9878	0.9884	0.9890
Monmouth County		55 - 59	0.9571	0.9729	0.9736	0.9746	0.9756	0.9767	0.9777	0.9787	0.9798	0.9808
Monmouth County		60 - 64	0.9371	0.9556	0.9566	0.9581	0.9597	0.9612	0.9628	0.9643	0.9659	0.9675
Monmouth County		65 - 69	0.8999	0.9293	0.9307	0.9330	0.9353	0.9376	0.9400	0.9423	0.9446	0.9469
Monmouth County		70 - 74	0.8411	0.8908	0.8929	0.8964	0.8999	0.9034	0.9069	0.9104	0.9139	0.9174
Monmouth County		75 - 79	0.7596	0.8205	0.8238	0.8295	0.8352	0.8408	0.8465	0.8521	0.8578	0.8635
Monmouth County		80 - 84	0.6563	0.7161	0.7203	0.7273	0.7343	0.7413	0.7483	0.7554	0.7624	0.7694
Monmouth County		85 +	0.3781	0.4137	0.4185	0.4265	0.4345	0.4425	0.4504	0.4584	0.4664	0.4744
Morris County	MALE	Births	0.9953	0.9977	0.9978	0.9979	0.9981	0.9982	0.9983	0.9985	0.9986	0.9988
Morris County		0 - 4	0.9989	0.9995	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997
Morris County		5 - 9	0.9989	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
Morris County		10 - 14	0.9980	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991
Morris County		15 - 19	0.9960	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9973	0.9974	0.9975
Morris County		20 - 24	0.9955	0.9955	0.9956	0.9957	0.9959	0.9961	0.9962	0.9964	0.9966	0.9967
Morris County		25 - 29	0.9950	0.9960	0.9961	0.9962	0.9964	0.9965	0.9967	0.9968	0.9970	0.9971
Morris County		30 - 34	0.9933	0.9952	0.9953	0.9955	0.9957	0.9958	0.9960	0.9962	0.9964	0.9965
Morris County		35 - 39	0.9934	0.9934	0.9935	0.9938	0.9940	0.9943	0.9945	0.9948	0.9950	0.9953
Morris County		40 - 44	0.9893	0.9912	0.9914	0.9918	0.9921	0.9924	0.9928	0.9931	0.9935	0.9938
Morris County		45 - 49	0.9817	0.9847	0.9851	0.9857	0.9863	0.9869	0.9875	0.9881	0.9887	0.9893
Morris County		50 - 54	0.9717	0.9777	0.9783	0.9791	0.9800	0.9809	0.9817	0.9826	0.9835	0.9843
Morris County		55 - 59	0.9471	0.9692	0.9699	0.9711	0.9722	0.9734	0.9746	0.9758	0.9769	0.9781
Morris County		60 - 64	0.9105	0.9447	0.9458	0.9478	0.9497	0.9517	0.9536	0.9555	0.9575	0.9594
Morris County		65 - 69	0.8604	0.9152	0.9168	0.9196	0.9224	0.9252	0.9280	0.9307	0.9335	0.9363
Morris County		70 - 74	0.7810	0.8732	0.8757	0.8797	0.8838	0.8879	0.8920	0.8960	0.9001	0.9042
Morris County		75 - 79	0.6739	0.7764	0.7807	0.7877	0.7948	0.8018	0.8088	0.8159	0.8229	0.8300
Morris County		80 - 84	0.5808	0.6734	0.6783	0.6863	0.6944	0.7024	0.7105	0.7186	0.7266	0.7347

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Morris County	FEMALE	85 +	0.3576	0.3630	0.3682	0.3769	0.3856	0.3943	0.4029	0.4116	0.4203	0.4290
Morris County		Births	0.9945	0.9956	0.9957	0.9960	0.9963	0.9966	0.9968	0.9971	0.9974	0.9977
Morris County		0 - 4	0.9986	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994
Morris County		5 - 9	0.9988	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998
Morris County		10 - 14	0.9988	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997
Morris County		15 - 19	0.9988	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993
Morris County		20 - 24	0.9979	0.9989	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992
Morris County		25 - 29	0.9965	0.9983	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9988
Morris County		30 - 34	0.9958	0.9967	0.9968	0.9969	0.9970	0.9972	0.9973	0.9974	0.9975	0.9977
Morris County		35 - 39	0.9948	0.9962	0.9963	0.9965	0.9966	0.9967	0.9969	0.9970	0.9972	0.9973
Morris County		40 - 44	0.9929	0.9946	0.9947	0.9949	0.9951	0.9953	0.9955	0.9957	0.9960	0.9962
Morris County		45 - 49	0.9891	0.9926	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943	0.9946	0.9949
Morris County		50 - 54	0.9821	0.9886	0.9889	0.9893	0.9898	0.9902	0.9907	0.9911	0.9915	0.9920
Morris County		55 - 59	0.9708	0.9809	0.9813	0.9820	0.9828	0.9835	0.9842	0.9850	0.9857	0.9864
Morris County		60 - 64	0.9440	0.9696	0.9702	0.9713	0.9723	0.9734	0.9745	0.9755	0.9766	0.9777
Morris County		65 - 69	0.9085	0.9458	0.9469	0.9487	0.9504	0.9522	0.9540	0.9558	0.9576	0.9593
Morris County		70 - 74	0.8583	0.8955	0.8975	0.9008	0.9042	0.9076	0.9109	0.9143	0.9176	0.9210
Morris County		75 - 79	0.7637	0.8246	0.8280	0.8335	0.8390	0.8445	0.8501	0.8556	0.8611	0.8666
Morris County		80 - 84	0.6647	0.7225	0.7266	0.7334	0.7403	0.7471	0.7540	0.7608	0.7677	0.7745
Morris County		85 +	0.3865	0.4246	0.4293	0.4371	0.4450	0.4528	0.4607	0.4685	0.4764	0.4842
Ocean County	MALE	Births	0.9917	0.9983	0.9983	0.9984	0.9985	0.9986	0.9988	0.9989	0.9990	0.9991
Ocean County		0 - 4	0.9980	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996
Ocean County		5 - 9	0.9985	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997
Ocean County		10 - 14	0.9966	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992
Ocean County		15 - 19	0.9942	0.9961	0.9962	0.9963	0.9965	0.9966	0.9967	0.9969	0.9970	0.9971
Ocean County		20 - 24	0.9945	0.9929	0.9931	0.9933	0.9936	0.9938	0.9941	0.9944	0.9946	0.9949
Ocean County		25 - 29	0.9949	0.9928	0.9929	0.9932	0.9935	0.9937	0.9940	0.9943	0.9946	0.9948
Ocean County		30 - 34	0.9924	0.9928	0.9929	0.9932	0.9935	0.9937	0.9940	0.9943	0.9945	0.9948
Ocean County		35 - 39	0.9892	0.9891	0.9894	0.9898	0.9902	0.9906	0.9910	0.9914	0.9918	0.9922
Ocean County		40 - 44	0.9818	0.9830	0.9834	0.9841	0.9847	0.9854	0.9860	0.9867	0.9874	0.9880
Ocean County		45 - 49	0.9696	0.9760	0.9766	0.9775	0.9785	0.9794	0.9804	0.9813	0.9823	0.9832
Ocean County		50 - 54	0.9476	0.9608	0.9617	0.9633	0.9648	0.9663	0.9678	0.9694	0.9709	0.9724
Ocean County		55 - 59	0.9257	0.9444	0.9457	0.9478	0.9499	0.9521	0.9542	0.9563	0.9584	0.9605
Ocean County		60 - 64	0.8961	0.9208	0.9224	0.9252	0.9280	0.9307	0.9335	0.9363	0.9391	0.9418
Ocean County		65 - 69	0.8471	0.8876	0.8898	0.8935	0.8972	0.9009	0.9046	0.9083	0.9119	0.9156
Ocean County		70 - 74	0.7820	0.8407	0.8437	0.8488	0.8540	0.8591	0.8642	0.8693	0.8744	0.8795
Ocean County		75 - 79	0.6907	0.7555	0.7601	0.7678	0.7755	0.7832	0.7909	0.7986	0.8063	0.8140
Ocean County		80 - 84	0.5995	0.6560	0.6611	0.6696	0.6781	0.6866	0.6950	0.7035	0.7120	0.7205
Ocean County		85 +	0.3677	0.3714	0.3766	0.3852	0.3937	0.4023	0.4109	0.4194	0.4280	0.4366
Ocean County	FEMALE	Births	0.9971	0.9979	0.9980	0.9981	0.9983	0.9984	0.9985	0.9987	0.9988	0.9989
Ocean County		0 - 4	0.9989	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996
Ocean County		5 - 9	0.9998	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997
Ocean County		10 - 14	0.9980	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996
Ocean County		15 - 19	0.9970	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987
Ocean County		20 - 24	0.9970	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980
Ocean County		25 - 29	0.9964	0.9968	0.9969	0.9970	0.9971	0.9972	0.9974	0.9975	0.9976	0.9977
Ocean County		30 - 34	0.9958	0.9948	0.9949	0.9951	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963
Ocean County		35 - 39	0.9945	0.9929	0.9930	0.9933	0.9936	0.9938	0.9941	0.9944	0.9946	0.9949

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Ocean County		40 - 44	0.9892	0.9901	0.9904	0.9907	0.9911	0.9915	0.9919	0.9923	0.9927	0.9930
Ocean County		45 - 49	0.9821	0.9861	0.9864	0.9869	0.9875	0.9880	0.9886	0.9891	0.9897	0.9902
Ocean County		50 - 54	0.9734	0.9782	0.9787	0.9796	0.9804	0.9813	0.9821	0.9830	0.9838	0.9847
Ocean County		55 - 59	0.9578	0.9669	0.9677	0.9689	0.9702	0.9715	0.9727	0.9740	0.9752	0.9765
Ocean County		60 - 64	0.9379	0.9527	0.9537	0.9554	0.9570	0.9587	0.9604	0.9620	0.9637	0.9653
Ocean County		65 - 69	0.9085	0.9276	0.9291	0.9314	0.9338	0.9362	0.9386	0.9409	0.9433	0.9457
Ocean County		70 - 74	0.8633	0.8878	0.8900	0.8936	0.8972	0.9008	0.9044	0.9080	0.9116	0.9152
Ocean County		75 - 79	0.7983	0.8264	0.8297	0.8351	0.8406	0.8461	0.8516	0.8570	0.8625	0.8680
Ocean County		80 - 84	0.7011	0.7238	0.7279	0.7347	0.7416	0.7484	0.7552	0.7620	0.7688	0.7756
Ocean County		85 +	0.4313	0.4280	0.4327	0.4405	0.4483	0.4561	0.4639	0.4717	0.4795	0.4873
Passaic County	MALE	Births	0.9909	0.9946	0.9948	0.9951	0.9954	0.9958	0.9961	0.9965	0.9968	0.9971
Passaic County		0 - 4	0.9977	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
Passaic County		5 - 9	0.9993	0.9989	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9994
Passaic County		10 - 14	0.9982	0.9978	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9984	0.9985
Passaic County		15 - 19	0.9953	0.9968	0.9968	0.9969	0.9971	0.9972	0.9973	0.9974	0.9975	0.9976
Passaic County		20 - 24	0.9920	0.9957	0.9958	0.9959	0.9961	0.9962	0.9964	0.9966	0.9967	0.9969
Passaic County		25 - 29	0.9882	0.9951	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962	0.9963	0.9965
Passaic County		30 - 34	0.9820	0.9925	0.9927	0.9930	0.9932	0.9935	0.9938	0.9941	0.9944	0.9946
Passaic County		35 - 39	0.9797	0.9883	0.9886	0.9890	0.9894	0.9899	0.9903	0.9908	0.9912	0.9916
Passaic County		40 - 44	0.9785	0.9847	0.9850	0.9856	0.9862	0.9868	0.9874	0.9880	0.9886	0.9892
Passaic County		45 - 49	0.9661	0.9787	0.9792	0.9800	0.9809	0.9817	0.9826	0.9834	0.9843	0.9851
Passaic County		50 - 54	0.9485	0.9671	0.9678	0.9691	0.9704	0.9717	0.9730	0.9743	0.9755	0.9768
Passaic County		55 - 59	0.9332	0.9505	0.9517	0.9536	0.9554	0.9573	0.9592	0.9611	0.9630	0.9649
Passaic County		60 - 64	0.8945	0.9315	0.9330	0.9354	0.9377	0.9401	0.9425	0.9449	0.9473	0.9497
Passaic County		65 - 69	0.8370	0.8937	0.8958	0.8993	0.9028	0.9063	0.9098	0.9132	0.9167	0.9202
Passaic County		70 - 74	0.7680	0.8407	0.8438	0.8489	0.8540	0.8591	0.8642	0.8694	0.8745	0.8796
Passaic County		75 - 79	0.6586	0.7604	0.7650	0.7725	0.7801	0.7876	0.7952	0.8027	0.8103	0.8178
Passaic County		80 - 84	0.5615	0.6603	0.6654	0.6737	0.6821	0.6905	0.6989	0.7073	0.7157	0.7240
Passaic County		85 +	0.3248	0.3840	0.3890	0.3974	0.4058	0.4142	0.4226	0.4310	0.4394	0.4478
Passaic County	FEMALE	Births	0.9906	0.9971	0.9972	0.9974	0.9976	0.9977	0.9979	0.9981	0.9983	0.9985
Passaic County		0 - 4	0.9978	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996
Passaic County		5 - 9	0.9993	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997
Passaic County		10 - 14	0.9983	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993
Passaic County		15 - 19	0.9973	0.9986	0.9987	0.9987	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990
Passaic County		20 - 24	0.9957	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986
Passaic County		25 - 29	0.9936	0.9970	0.9971	0.9972	0.9973	0.9974	0.9976	0.9977	0.9978	0.9979
Passaic County		30 - 34	0.9900	0.9971	0.9971	0.9972	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979
Passaic County		35 - 39	0.9879	0.9955	0.9956	0.9958	0.9960	0.9961	0.9963	0.9965	0.9966	0.9968
Passaic County		40 - 44	0.9888	0.9915	0.9917	0.9920	0.9924	0.9927	0.9930	0.9934	0.9937	0.9940
Passaic County		45 - 49	0.9864	0.9873	0.9876	0.9881	0.9886	0.9891	0.9896	0.9901	0.9906	0.9911
Passaic County		50 - 54	0.9744	0.9812	0.9816	0.9823	0.9831	0.9838	0.9845	0.9853	0.9860	0.9867
Passaic County		55 - 59	0.9569	0.9714	0.9721	0.9732	0.9743	0.9754	0.9765	0.9775	0.9786	0.9797
Passaic County		60 - 64	0.9364	0.9609	0.9617	0.9631	0.9645	0.9658	0.9672	0.9686	0.9699	0.9713
Passaic County		65 - 69	0.9103	0.9359	0.9371	0.9392	0.9413	0.9434	0.9455	0.9476	0.9497	0.9518
Passaic County		70 - 74	0.8585	0.8927	0.8948	0.8983	0.9017	0.9051	0.9086	0.9120	0.9155	0.9189
Passaic County		75 - 79	0.7716	0.8273	0.8305	0.8360	0.8414	0.8469	0.8523	0.8577	0.8632	0.8686
Passaic County		80 - 84	0.6756	0.7257	0.7298	0.7366	0.7433	0.7501	0.7569	0.7637	0.7704	0.7772
Passaic County		85 +	0.4033	0.4271	0.4318	0.4396	0.4474	0.4552	0.4630	0.4708	0.4786	0.4865

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Somerset County	MALE	Births	0.9930	0.9979	0.9979	0.9981	0.9982	0.9983	0.9985	0.9986	0.9987	0.9989
Somerset County		0 - 4	0.9980	0.9993	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995	0.9995	0.9996
Somerset County		5 - 9	0.9996	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994	0.9995	0.9995
Somerset County		10 - 14	0.9961	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987	0.9987	0.9988
Somerset County		15 - 19	0.9949	0.9966	0.9967	0.9968	0.9969	0.9970	0.9972	0.9973	0.9974	0.9975
Somerset County		20 - 24	0.9956	0.9971	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979
Somerset County		25 - 29	0.9950	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990
Somerset County		30 - 34	0.9945	0.9953	0.9954	0.9956	0.9957	0.9959	0.9961	0.9963	0.9964	0.9966
Somerset County		35 - 39	0.9891	0.9931	0.9933	0.9936	0.9938	0.9941	0.9943	0.9946	0.9948	0.9951
Somerset County		40 - 44	0.9874	0.9923	0.9924	0.9927	0.9930	0.9933	0.9936	0.9939	0.9942	0.9945
Somerset County		45 - 49	0.9813	0.9881	0.9884	0.9888	0.9893	0.9898	0.9902	0.9907	0.9912	0.9917
Somerset County		50 - 54	0.9689	0.9813	0.9817	0.9824	0.9832	0.9839	0.9846	0.9854	0.9861	0.9868
Somerset County		55 - 59	0.9499	0.9713	0.9720	0.9731	0.9742	0.9753	0.9764	0.9775	0.9786	0.9797
Somerset County		60 - 64	0.9152	0.9580	0.9589	0.9604	0.9618	0.9633	0.9648	0.9662	0.9677	0.9692
Somerset County		65 - 69	0.8646	0.9162	0.9179	0.9206	0.9234	0.9261	0.9289	0.9316	0.9344	0.9371
Somerset County		70 - 74	0.8034	0.8580	0.8607	0.8653	0.8698	0.8744	0.8790	0.8835	0.8881	0.8926
Somerset County		75 - 79	0.6964	0.7726	0.7769	0.7840	0.7912	0.7984	0.8055	0.8127	0.8199	0.8270
Somerset County		80 - 84	0.6006	0.6616	0.6666	0.6749	0.6833	0.6917	0.7000	0.7084	0.7167	0.7251
Somerset County		85 +	0.3539	0.3499	0.3552	0.3640	0.3729	0.3818	0.3906	0.3995	0.4084	0.4172
Somerset County	FEMALE	Births	0.9952	0.9985	0.9986	0.9987	0.9988	0.9989	0.9990	0.9990	0.9991	0.9992
Somerset County		0 - 4	0.9991	0.9990	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994
Somerset County		5 - 9	0.9996	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9996	0.9996	0.9996
Somerset County		10 - 14	0.9985	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
Somerset County		15 - 19	0.9982	0.9980	0.9980	0.9981	0.9981	0.9982	0.9983	0.9984	0.9984	0.9985
Somerset County		20 - 24	0.9987	0.9976	0.9977	0.9978	0.9978	0.9979	0.9980	0.9981	0.9982	0.9983
Somerset County		25 - 29	0.9980	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992
Somerset County		30 - 34	0.9970	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990
Somerset County		35 - 39	0.9964	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981
Somerset County		40 - 44	0.9934	0.9954	0.9955	0.9957	0.9959	0.9961	0.9963	0.9964	0.9966	0.9968
Somerset County		45 - 49	0.9870	0.9907	0.9909	0.9913	0.9917	0.9920	0.9924	0.9928	0.9931	0.9935
Somerset County		50 - 54	0.9831	0.9834	0.9838	0.9845	0.9851	0.9858	0.9864	0.9870	0.9877	0.9883
Somerset County		55 - 59	0.9666	0.9813	0.9817	0.9824	0.9831	0.9838	0.9846	0.9853	0.9860	0.9867
Somerset County		60 - 64	0.9478	0.9699	0.9706	0.9716	0.9727	0.9737	0.9748	0.9758	0.9769	0.9779
Somerset County		65 - 69	0.9104	0.9402	0.9414	0.9434	0.9453	0.9473	0.9493	0.9512	0.9532	0.9551
Somerset County		70 - 74	0.8576	0.9082	0.9100	0.9129	0.9159	0.9188	0.9218	0.9247	0.9277	0.9306
Somerset County		75 - 79	0.7866	0.8397	0.8427	0.8478	0.8528	0.8579	0.8629	0.8680	0.8730	0.8781
Somerset County		80 - 84	0.6911	0.7286	0.7326	0.7393	0.7460	0.7527	0.7594	0.7661	0.7728	0.7795
Somerset County		85 +	0.4381	0.3942	0.3992	0.4074	0.4157	0.4240	0.4322	0.4405	0.4487	0.4570
Sussex County	MALE	Births	0.9912	0.9938	0.9940	0.9944	0.9948	0.9952	0.9956	0.9960	0.9964	0.9967
Sussex County		0 - 4	0.9985	0.9988	0.9988	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993
Sussex County		5 - 9	1.0000	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997
Sussex County		10 - 14	0.9995	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994
Sussex County		15 - 19	0.9976	0.9929	0.9931	0.9933	0.9936	0.9938	0.9941	0.9943	0.9946	0.9948
Sussex County		20 - 24	0.9952	0.9865	0.9868	0.9873	0.9878	0.9883	0.9887	0.9892	0.9897	0.9902
Sussex County		25 - 29	0.9947	0.9900	0.9902	0.9906	0.9909	0.9913	0.9917	0.9921	0.9924	0.9928
Sussex County		30 - 34	0.9952	0.9956	0.9957	0.9959	0.9960	0.9962	0.9964	0.9965	0.9967	0.9969
Sussex County		35 - 39	0.9938	0.9937	0.9938	0.9941	0.9943	0.9945	0.9948	0.9950	0.9953	0.9955
Sussex County		40 - 44	0.9869	0.9865	0.9869	0.9874	0.9879	0.9884	0.9889	0.9895	0.9900	0.9905

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Sussex County		45 - 49	0.9836	0.9809	0.9813	0.9821	0.9828	0.9836	0.9844	0.9851	0.9859	0.9866
Sussex County		50 - 54	0.9652	0.9715	0.9721	0.9732	0.9743	0.9755	0.9766	0.9777	0.9788	0.9799
Sussex County		55 - 59	0.9280	0.9512	0.9523	0.9542	0.9560	0.9579	0.9598	0.9616	0.9635	0.9653
Sussex County		60 - 64	0.8969	0.9266	0.9281	0.9307	0.9332	0.9358	0.9384	0.9410	0.9435	0.9461
Sussex County		65 - 69	0.8498	0.8998	0.9018	0.9050	0.9083	0.9116	0.9149	0.9182	0.9215	0.9248
Sussex County		70 - 74	0.7481	0.8282	0.8316	0.8371	0.8426	0.8481	0.8536	0.8591	0.8646	0.8702
Sussex County		75 - 79	0.6387	0.7441	0.7490	0.7570	0.7651	0.7731	0.7812	0.7893	0.7973	0.8054
Sussex County		80 - 84	0.5379	0.6301	0.6356	0.6447	0.6539	0.6630	0.6721	0.6813	0.6904	0.6995
Sussex County		85 +	0.3014	0.3195	0.3250	0.3343	0.3436	0.3529	0.3622	0.3714	0.3807	0.3900
Sussex County	FEMALE	Births	0.9948	0.9933	0.9935	0.9940	0.9944	0.9948	0.9952	0.9956	0.9961	0.9965
Sussex County		0 - 4	0.9989	0.9987	0.9988	0.9988	0.9989	0.9990	0.9990	0.9991	0.9992	0.9993
Sussex County		5 - 9	0.9990	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997
Sussex County		10 - 14	0.9983	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9993	0.9993	0.9993
Sussex County		15 - 19	0.9975	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974	0.9975	0.9976	0.9977
Sussex County		20 - 24	0.9959	0.9956	0.9957	0.9958	0.9960	0.9962	0.9963	0.9965	0.9966	0.9968
Sussex County		25 - 29	0.9953	0.9958	0.9958	0.9960	0.9962	0.9963	0.9965	0.9966	0.9968	0.9970
Sussex County		30 - 34	0.9965	0.9944	0.9945	0.9947	0.9949	0.9951	0.9954	0.9956	0.9958	0.9960
Sussex County		35 - 39	0.9955	0.9932	0.9934	0.9936	0.9939	0.9941	0.9944	0.9946	0.9949	0.9951
Sussex County		40 - 44	0.9926	0.9927	0.9928	0.9931	0.9934	0.9937	0.9940	0.9943	0.9945	0.9948
Sussex County		45 - 49	0.9823	0.9898	0.9900	0.9904	0.9908	0.9912	0.9916	0.9920	0.9924	0.9928
Sussex County		50 - 54	0.9747	0.9828	0.9832	0.9838	0.9845	0.9852	0.9859	0.9865	0.9872	0.9879
Sussex County		55 - 59	0.9630	0.9750	0.9756	0.9766	0.9775	0.9785	0.9794	0.9804	0.9813	0.9823
Sussex County		60 - 64	0.9394	0.9530	0.9540	0.9557	0.9573	0.9589	0.9606	0.9622	0.9639	0.9655
Sussex County		65 - 69	0.9030	0.9212	0.9227	0.9253	0.9279	0.9305	0.9331	0.9356	0.9382	0.9408
Sussex County		70 - 74	0.8502	0.8796	0.8819	0.8858	0.8896	0.8935	0.8974	0.9012	0.9051	0.9090
Sussex County		75 - 79	0.7569	0.8087	0.8124	0.8184	0.8244	0.8304	0.8365	0.8425	0.8485	0.8545
Sussex County		80 - 84	0.6609	0.6942	0.6987	0.7063	0.7138	0.7214	0.7289	0.7365	0.7440	0.7516
Sussex County		85 +	0.3883	0.3744	0.3795	0.3880	0.3966	0.4051	0.4136	0.4222	0.4307	0.4392
Union County	MALE	Births	0.9941	0.9945	0.9947	0.9950	0.9954	0.9957	0.9961	0.9964	0.9968	0.9971
Union County		0 - 4	0.9979	0.9981	0.9981	0.9982	0.9983	0.9984	0.9985	0.9987	0.9988	0.9989
Union County		5 - 9	0.9983	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
Union County		10 - 14	0.9970	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992
Union County		15 - 19	0.9940	0.9952	0.9953	0.9955	0.9957	0.9958	0.9960	0.9962	0.9963	0.9965
Union County		20 - 24	0.9934	0.9943	0.9945	0.9947	0.9949	0.9951	0.9953	0.9955	0.9957	0.9959
Union County		25 - 29	0.9902	0.9949	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9961	0.9963
Union County		30 - 34	0.9831	0.9948	0.9949	0.9951	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963
Union County		35 - 39	0.9800	0.9932	0.9934	0.9936	0.9939	0.9941	0.9944	0.9946	0.9949	0.9951
Union County		40 - 44	0.9772	0.9857	0.9860	0.9866	0.9871	0.9877	0.9882	0.9888	0.9893	0.9899
Union County		45 - 49	0.9713	0.9761	0.9767	0.9776	0.9786	0.9795	0.9805	0.9814	0.9824	0.9833
Union County		50 - 54	0.9579	0.9694	0.9701	0.9713	0.9725	0.9737	0.9749	0.9761	0.9772	0.9784
Union County		55 - 59	0.9322	0.9565	0.9575	0.9592	0.9608	0.9625	0.9642	0.9658	0.9675	0.9691
Union County		60 - 64	0.8959	0.9376	0.9389	0.9411	0.9433	0.9454	0.9476	0.9498	0.9520	0.9542
Union County		65 - 69	0.8501	0.8988	0.9008	0.9041	0.9074	0.9108	0.9141	0.9174	0.9207	0.9240
Union County		70 - 74	0.7835	0.8483	0.8512	0.8561	0.8609	0.8658	0.8707	0.8756	0.8804	0.8853
Union County		75 - 79	0.6608	0.7786	0.7828	0.7898	0.7967	0.8037	0.8107	0.8177	0.8247	0.8316
Union County		80 - 84	0.5607	0.6720	0.6768	0.6849	0.6930	0.7011	0.7092	0.7173	0.7254	0.7335
Union County		85 +	0.2912	0.3808	0.3859	0.3943	0.4027	0.4112	0.4196	0.4281	0.4365	0.4450
Union County	FEMALE	Births	0.9921	0.9947	0.9949	0.9953	0.9956	0.9959	0.9963	0.9966	0.9969	0.9972

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Union County		0 - 4	0.9977	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
Union County		5 - 9	0.9991	0.9993	0.9993	0.9994	0.9994	0.9994	0.9995	0.9995	0.9996	0.9996
Union County		10 - 14	0.9981	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991	0.9991
Union County		15 - 19	0.9980	0.9982	0.9982	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987
Union County		20 - 24	0.9982	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9988
Union County		25 - 29	0.9972	0.9979	0.9980	0.9980	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985
Union County		30 - 34	0.9942	0.9964	0.9965	0.9966	0.9967	0.9969	0.9970	0.9971	0.9973	0.9974
Union County		35 - 39	0.9933	0.9940	0.9941	0.9944	0.9946	0.9948	0.9950	0.9953	0.9955	0.9957
Union County		40 - 44	0.9917	0.9907	0.9909	0.9912	0.9916	0.9920	0.9923	0.9927	0.9930	0.9934
Union County		45 - 49	0.9842	0.9874	0.9877	0.9882	0.9887	0.9892	0.9897	0.9902	0.9907	0.9912
Union County		50 - 54	0.9775	0.9815	0.9819	0.9826	0.9833	0.9841	0.9848	0.9855	0.9862	0.9869
Union County		55 - 59	0.9651	0.9704	0.9710	0.9722	0.9733	0.9744	0.9756	0.9767	0.9778	0.9790
Union County		60 - 64	0.9420	0.9586	0.9594	0.9609	0.9624	0.9638	0.9653	0.9667	0.9682	0.9696
Union County		65 - 69	0.9068	0.9392	0.9404	0.9424	0.9444	0.9464	0.9484	0.9504	0.9524	0.9544
Union County		70 - 74	0.8642	0.8946	0.8966	0.9000	0.9034	0.9068	0.9101	0.9135	0.9169	0.9203
Union County		75 - 79	0.7820	0.8369	0.8400	0.8451	0.8502	0.8554	0.8605	0.8657	0.8708	0.8759
Union County		80 - 84	0.6802	0.7398	0.7437	0.7501	0.7565	0.7629	0.7694	0.7758	0.7822	0.7886
Union County		85 +	0.3930	0.4579	0.4624	0.4697	0.4771	0.4845	0.4919	0.4993	0.5067	0.5141
Warren County	MALE	Births	0.9939	0.9982	0.9983	0.9984	0.9985	0.9986	0.9987	0.9988	0.9989	0.9991
Warren County		0 - 4	0.9986	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999
Warren County		5 - 9	0.9992	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9996	0.9996	0.9996
Warren County		10 - 14	0.9983	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990	0.9991
Warren County		15 - 19	0.9974	0.9952	0.9953	0.9955	0.9956	0.9958	0.9960	0.9961	0.9963	0.9965
Warren County		20 - 24	0.9943	0.9949	0.9950	0.9951	0.9953	0.9955	0.9957	0.9959	0.9961	0.9963
Warren County		25 - 29	0.9940	0.9944	0.9945	0.9947	0.9949	0.9951	0.9953	0.9955	0.9958	0.9960
Warren County		30 - 34	0.9892	0.9930	0.9932	0.9934	0.9937	0.9940	0.9942	0.9945	0.9947	0.9950
Warren County		35 - 39	0.9845	0.9929	0.9931	0.9933	0.9936	0.9939	0.9941	0.9944	0.9947	0.9949
Warren County		40 - 44	0.9891	0.9844	0.9848	0.9854	0.9860	0.9866	0.9872	0.9878	0.9884	0.9890
Warren County		45 - 49	0.9820	0.9769	0.9774	0.9783	0.9793	0.9802	0.9811	0.9820	0.9829	0.9838
Warren County		50 - 54	0.9632	0.9730	0.9736	0.9746	0.9757	0.9767	0.9778	0.9788	0.9799	0.9810
Warren County		55 - 59	0.9293	0.9653	0.9661	0.9674	0.9688	0.9701	0.9714	0.9727	0.9741	0.9754
Warren County		60 - 64	0.8815	0.9345	0.9359	0.9382	0.9405	0.9428	0.9451	0.9474	0.9496	0.9519
Warren County		65 - 69	0.8363	0.8912	0.8933	0.8969	0.9004	0.9040	0.9076	0.9112	0.9147	0.9183
Warren County		70 - 74	0.7627	0.8557	0.8585	0.8631	0.8677	0.8724	0.8770	0.8816	0.8863	0.8909
Warren County		75 - 79	0.6789	0.7606	0.7651	0.7726	0.7802	0.7877	0.7953	0.8028	0.8104	0.8179
Warren County		80 - 84	0.5587	0.6603	0.6653	0.6737	0.6821	0.6905	0.6988	0.7072	0.7156	0.7240
Warren County		85 +	0.2815	0.3735	0.3787	0.3872	0.3958	0.4043	0.4128	0.4214	0.4299	0.4385
Warren County	FEMALE	Births	0.9956	0.9962	0.9963	0.9966	0.9968	0.9971	0.9973	0.9975	0.9978	0.9980
Warren County		0 - 4	0.9979	0.9996	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9998
Warren County		5 - 9	0.9992	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Warren County		10 - 14	0.9991	0.9979	0.9980	0.9981	0.9982	0.9982	0.9983	0.9984	0.9985	0.9985
Warren County		15 - 19	0.9967	0.9979	0.9980	0.9981	0.9981	0.9982	0.9983	0.9983	0.9984	0.9985
Warren County		20 - 24	0.9949	0.9991	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993
Warren County		25 - 29	0.9968	0.9973	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980
Warren County		30 - 34	0.9963	0.9975	0.9976	0.9977	0.9978	0.9978	0.9979	0.9980	0.9981	0.9982
Warren County		35 - 39	0.9933	0.9971	0.9971	0.9972	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979
Warren County		40 - 44	0.9911	0.9938	0.9939	0.9942	0.9944	0.9947	0.9949	0.9951	0.9954	0.9956
Warren County		45 - 49	0.9853	0.9898	0.9900	0.9904	0.9908	0.9912	0.9916	0.9920	0.9924	0.9928

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Warren County		50 - 54	0.9709	0.9821	0.9825	0.9832	0.9839	0.9846	0.9853	0.9860	0.9867	0.9874
Warren County		55 - 59	0.9467	0.9719	0.9725	0.9736	0.9747	0.9758	0.9768	0.9779	0.9790	0.9800
Warren County		60 - 64	0.9273	0.9625	0.9633	0.9646	0.9659	0.9672	0.9685	0.9698	0.9712	0.9725
Warren County		65 - 69	0.8992	0.9266	0.9281	0.9305	0.9329	0.9353	0.9377	0.9401	0.9425	0.9449
Warren County		70 - 74	0.8251	0.8751	0.8775	0.8816	0.8856	0.8896	0.8936	0.8976	0.9016	0.9056
Warren County		75 - 79	0.7481	0.8164	0.8198	0.8256	0.8314	0.8372	0.8430	0.8488	0.8545	0.8603
Warren County		80 - 84	0.6587	0.7075	0.7118	0.7191	0.7263	0.7335	0.7407	0.7479	0.7552	0.7624
Warren County		85 +	0.4257	0.4093	0.4141	0.4222	0.4302	0.4383	0.4464	0.4544	0.4625	0.4705
Connecticut	MALE	Births	0.9926	0.9951	0.9953	0.9956	0.9959	0.9962	0.9965	0.9968	0.9971	0.9974
Connecticut		0 - 4	0.9978	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
Connecticut		5 - 9	0.9990	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998
Connecticut		10 - 14	0.9970	0.9986	0.9986	0.9987	0.9987	0.9988	0.9989	0.9989	0.9990	0.9990
Connecticut		15 - 19	0.9934	0.9954	0.9955	0.9956	0.9958	0.9960	0.9961	0.9963	0.9965	0.9966
Connecticut		20 - 24	0.9920	0.9930	0.9932	0.9934	0.9937	0.9939	0.9942	0.9944	0.9947	0.9949
Connecticut		25 - 29	0.9911	0.9932	0.9933	0.9936	0.9938	0.9941	0.9943	0.9946	0.9949	0.9951
Connecticut		30 - 34	0.9899	0.9936	0.9937	0.9940	0.9942	0.9945	0.9947	0.9949	0.9952	0.9954
Connecticut		35 - 39	0.9883	0.9916	0.9918	0.9921	0.9924	0.9927	0.9931	0.9934	0.9937	0.9940
Connecticut		40 - 44	0.9840	0.9876	0.9879	0.9884	0.9888	0.9893	0.9898	0.9903	0.9908	0.9913
Connecticut		45 - 49	0.9760	0.9823	0.9827	0.9834	0.9841	0.9848	0.9855	0.9862	0.9869	0.9876
Connecticut		50 - 54	0.9634	0.9720	0.9727	0.9737	0.9748	0.9759	0.9770	0.9781	0.9792	0.9803
Connecticut		55 - 59	0.9384	0.9578	0.9588	0.9604	0.9620	0.9636	0.9652	0.9668	0.9684	0.9700
Connecticut		60 - 64	0.9021	0.9411	0.9423	0.9444	0.9465	0.9485	0.9506	0.9526	0.9547	0.9568
Connecticut		65 - 69	0.8531	0.9118	0.9135	0.9164	0.9193	0.9222	0.9251	0.9280	0.9309	0.9338
Connecticut		70 - 74	0.7803	0.8583	0.8610	0.8656	0.8701	0.8747	0.8792	0.8838	0.8883	0.8929
Connecticut		75 - 79	0.6819	0.7761	0.7803	0.7874	0.7944	0.8015	0.8085	0.8156	0.8226	0.8297
Connecticut		80 - 84	0.5884	0.6773	0.6821	0.6900	0.6980	0.7060	0.7139	0.7219	0.7299	0.7378
Connecticut		85 +	0.3662	0.3943	0.3992	0.4075	0.4157	0.4240	0.4323	0.4405	0.4488	0.4570
Connecticut	FEMALE	Births	0.9935	0.9950	0.9952	0.9955	0.9958	0.9961	0.9964	0.9968	0.9971	0.9974
Connecticut		0 - 4	0.9983	0.9989	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994
Connecticut		5 - 9	0.9994	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
Connecticut		10 - 14	0.9989	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996
Connecticut		15 - 19	0.9982	0.9988	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9990	0.9991
Connecticut		20 - 24	0.9972	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990
Connecticut		25 - 29	0.9957	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	0.9991
Connecticut		30 - 34	0.9949	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982	0.9982	0.9983
Connecticut		35 - 39	0.9940	0.9958	0.9959	0.9960	0.9962	0.9964	0.9965	0.9967	0.9968	0.9970
Connecticut		40 - 44	0.9913	0.9928	0.9929	0.9932	0.9935	0.9938	0.9941	0.9943	0.9946	0.9949
Connecticut		45 - 49	0.9856	0.9891	0.9894	0.9898	0.9902	0.9907	0.9911	0.9915	0.9919	0.9924
Connecticut		50 - 54	0.9759	0.9855	0.9858	0.9864	0.9870	0.9875	0.9881	0.9887	0.9892	0.9898
Connecticut		55 - 59	0.9625	0.9765	0.9770	0.9779	0.9788	0.9797	0.9806	0.9815	0.9824	0.9833
Connecticut		60 - 64	0.9443	0.9610	0.9618	0.9632	0.9645	0.9659	0.9673	0.9686	0.9700	0.9714
Connecticut		65 - 69	0.9132	0.9366	0.9378	0.9399	0.9420	0.9441	0.9461	0.9482	0.9503	0.9524
Connecticut		70 - 74	0.8675	0.8980	0.9000	0.9033	0.9065	0.9098	0.9131	0.9164	0.9196	0.9229
Connecticut		75 - 79	0.7943	0.8344	0.8375	0.8427	0.8479	0.8532	0.8584	0.8636	0.8688	0.8740
Connecticut		80 - 84	0.6935	0.7333	0.7372	0.7438	0.7504	0.7570	0.7636	0.7702	0.7768	0.7833
Connecticut		85 +	0.4100	0.4401	0.4447	0.4523	0.4599	0.4676	0.4752	0.4828	0.4905	0.4981
Fairfield County	MALE	Births	0.9934	0.9958	0.9959	0.9962	0.9965	0.9967	0.9970	0.9973	0.9975	0.9978
Fairfield County		0 - 4	0.9979	0.9990	0.9990	0.9991	0.9992	0.9992	0.9993	0.9993	0.9994	0.9994

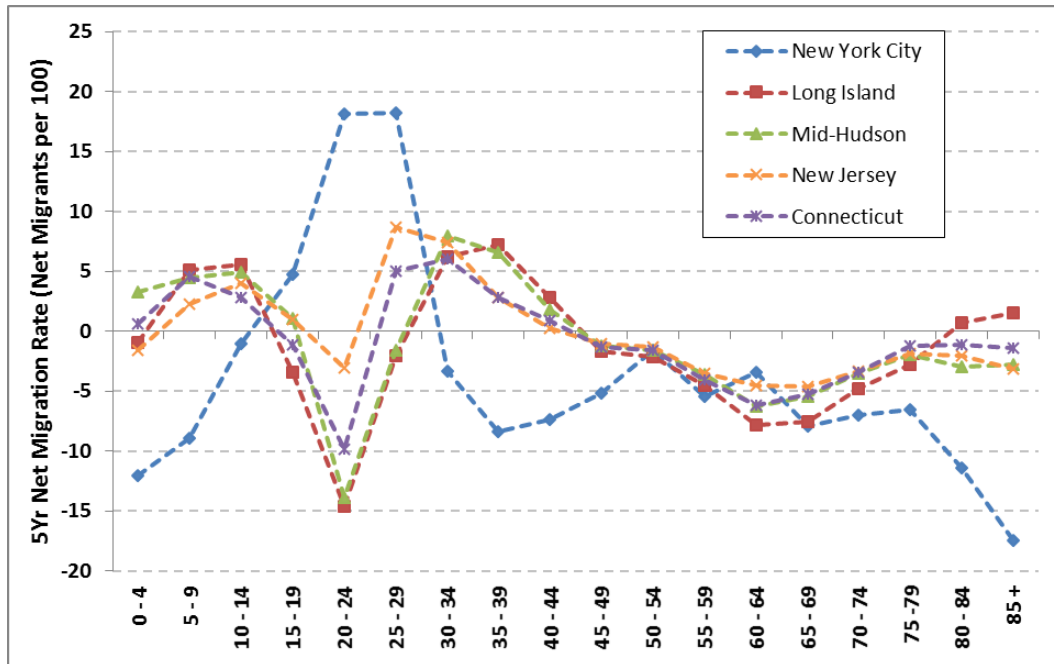
Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Fairfield County		5 - 9	0.9988	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998
Fairfield County		10 - 14	0.9968	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993
Fairfield County		15 - 19	0.9925	0.9956	0.9957	0.9958	0.9960	0.9961	0.9963	0.9964	0.9966	0.9967
Fairfield County		20 - 24	0.9906	0.9930	0.9932	0.9934	0.9937	0.9939	0.9942	0.9944	0.9947	0.9949
Fairfield County		25 - 29	0.9905	0.9941	0.9942	0.9944	0.9946	0.9949	0.9951	0.9953	0.9955	0.9957
Fairfield County		30 - 34	0.9905	0.9942	0.9943	0.9946	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958
Fairfield County		35 - 39	0.9886	0.9928	0.9929	0.9932	0.9935	0.9938	0.9940	0.9943	0.9946	0.9948
Fairfield County		40 - 44	0.9838	0.9895	0.9898	0.9902	0.9906	0.9910	0.9914	0.9918	0.9922	0.9926
Fairfield County		45 - 49	0.9751	0.9847	0.9851	0.9857	0.9863	0.9869	0.9875	0.9881	0.9887	0.9893
Fairfield County		50 - 54	0.9652	0.9747	0.9753	0.9763	0.9772	0.9782	0.9792	0.9802	0.9812	0.9822
Fairfield County		55 - 59	0.9460	0.9627	0.9635	0.9650	0.9664	0.9678	0.9692	0.9707	0.9721	0.9735
Fairfield County		60 - 64	0.9093	0.9490	0.9500	0.9518	0.9536	0.9554	0.9572	0.9590	0.9608	0.9626
Fairfield County		65 - 69	0.8518	0.9200	0.9215	0.9242	0.9268	0.9294	0.9320	0.9347	0.9373	0.9399
Fairfield County		70 - 74	0.7714	0.8678	0.8704	0.8746	0.8789	0.8831	0.8873	0.8916	0.8958	0.9001
Fairfield County		75 - 79	0.6734	0.7843	0.7884	0.7952	0.8020	0.8088	0.8156	0.8224	0.8292	0.8360
Fairfield County		80 - 84	0.5804	0.6914	0.6959	0.7036	0.7112	0.7188	0.7264	0.7340	0.7416	0.7493
Fairfield County		85 +	0.3720	0.4209	0.4257	0.4336	0.4414	0.4493	0.4572	0.4651	0.4730	0.4809
Fairfield County	FEMALE	Births	0.9932	0.9952	0.9954	0.9957	0.9960	0.9963	0.9966	0.9969	0.9972	0.9975
Fairfield County		0 - 4	0.9983	0.9988	0.9989	0.9989	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993
Fairfield County		5 - 9	0.9995	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998
Fairfield County		10 - 14	0.9991	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996
Fairfield County		15 - 19	0.9981	0.9989	0.9989	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992
Fairfield County		20 - 24	0.9968	0.9989	0.9989	0.9990	0.9990	0.9990	0.9991	0.9991	0.9992	0.9992
Fairfield County		25 - 29	0.9949	0.9990	0.9990	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9993
Fairfield County		30 - 34	0.9940	0.9982	0.9982	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987
Fairfield County		35 - 39	0.9938	0.9967	0.9968	0.9969	0.9970	0.9971	0.9973	0.9974	0.9975	0.9976
Fairfield County		40 - 44	0.9919	0.9943	0.9944	0.9947	0.9949	0.9951	0.9953	0.9955	0.9958	0.9960
Fairfield County		45 - 49	0.9862	0.9916	0.9918	0.9921	0.9925	0.9928	0.9931	0.9935	0.9938	0.9941
Fairfield County		50 - 54	0.9757	0.9886	0.9888	0.9893	0.9897	0.9902	0.9906	0.9911	0.9915	0.9920
Fairfield County		55 - 59	0.9604	0.9796	0.9801	0.9808	0.9816	0.9824	0.9832	0.9839	0.9847	0.9855
Fairfield County		60 - 64	0.9447	0.9655	0.9662	0.9674	0.9686	0.9698	0.9710	0.9723	0.9735	0.9747
Fairfield County		65 - 69	0.9177	0.9453	0.9464	0.9482	0.9500	0.9517	0.9535	0.9553	0.9571	0.9589
Fairfield County		70 - 74	0.8705	0.9064	0.9082	0.9112	0.9142	0.9172	0.9202	0.9232	0.9262	0.9292
Fairfield County		75 - 79	0.7967	0.8391	0.8421	0.8472	0.8522	0.8573	0.8624	0.8675	0.8725	0.8776
Fairfield County		80 - 84	0.6928	0.7407	0.7446	0.7510	0.7574	0.7638	0.7702	0.7766	0.7830	0.7894
Fairfield County		85 +	0.3957	0.4480	0.4526	0.4601	0.4676	0.4751	0.4827	0.4902	0.4977	0.5052
Litchfield County	MALE	Births	0.9950	0.9950	0.9952	0.9955	0.9958	0.9961	0.9965	0.9968	0.9971	0.9974
Litchfield County		0 - 4	0.9982	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987	0.9988	0.9989	0.9990
Litchfield County		5 - 9	0.9987	0.9996	0.9996	0.9996	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998
Litchfield County		10 - 14	0.9963	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	0.9982	0.9983	0.9983
Litchfield County		15 - 19	0.9937	0.9937	0.9938	0.9940	0.9943	0.9945	0.9947	0.9949	0.9952	0.9954
Litchfield County		20 - 24	0.9927	0.9934	0.9935	0.9937	0.9940	0.9942	0.9945	0.9947	0.9949	0.9952
Litchfield County		25 - 29	0.9921	0.9937	0.9939	0.9941	0.9943	0.9946	0.9948	0.9950	0.9953	0.9955
Litchfield County		30 - 34	0.9942	0.9908	0.9910	0.9914	0.9917	0.9920	0.9924	0.9927	0.9931	0.9934
Litchfield County		35 - 39	0.9942	0.9876	0.9878	0.9883	0.9888	0.9892	0.9897	0.9902	0.9907	0.9911
Litchfield County		40 - 44	0.9919	0.9850	0.9853	0.9859	0.9865	0.9871	0.9877	0.9882	0.9888	0.9894
Litchfield County		45 - 49	0.9832	0.9834	0.9838	0.9844	0.9851	0.9857	0.9864	0.9870	0.9877	0.9883
Litchfield County		50 - 54	0.9662	0.9753	0.9759	0.9768	0.9778	0.9788	0.9797	0.9807	0.9817	0.9826

Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Litchfield County		55 - 59	0.9429	0.9620	0.9629	0.9643	0.9658	0.9672	0.9687	0.9701	0.9716	0.9730
Litchfield County		60 - 64	0.9100	0.9387	0.9399	0.9421	0.9442	0.9464	0.9485	0.9507	0.9528	0.9550
Litchfield County		65 - 69	0.8601	0.9144	0.9161	0.9189	0.9217	0.9245	0.9273	0.9301	0.9330	0.9358
Litchfield County		70 - 74	0.7944	0.8567	0.8594	0.8640	0.8686	0.8732	0.8778	0.8825	0.8871	0.8917
Litchfield County		75 - 79	0.6880	0.7783	0.7825	0.7895	0.7965	0.8035	0.8104	0.8174	0.8244	0.8314
Litchfield County		80 - 84	0.6049	0.6721	0.6770	0.6851	0.6932	0.7013	0.7093	0.7174	0.7255	0.7336
Litchfield County		85 +	0.4006	0.3743	0.3794	0.3879	0.3965	0.4050	0.4135	0.4221	0.4306	0.4391
Litchfield County	FEMALE	Births	0.9951	0.9975	0.9976	0.9978	0.9979	0.9981	0.9982	0.9984	0.9985	0.9987
Litchfield County		0 - 4	0.9990	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
Litchfield County		5 - 9	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Litchfield County		10 - 14	0.9985	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994	0.9994
Litchfield County		15 - 19	0.9981	0.9991	0.9992	0.9992	0.9992	0.9992	0.9993	0.9993	0.9993	0.9994
Litchfield County		20 - 24	0.9987	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996
Litchfield County		25 - 29	0.9990	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9987	0.9987	0.9988
Litchfield County		30 - 34	0.9981	0.9967	0.9967	0.9969	0.9970	0.9971	0.9972	0.9974	0.9975	0.9976
Litchfield County		35 - 39	0.9962	0.9961	0.9962	0.9963	0.9965	0.9966	0.9968	0.9969	0.9971	0.9972
Litchfield County		40 - 44	0.9918	0.9943	0.9944	0.9946	0.9949	0.9951	0.9953	0.9955	0.9958	0.9960
Litchfield County		45 - 49	0.9867	0.9879	0.9882	0.9887	0.9892	0.9897	0.9901	0.9906	0.9911	0.9916
Litchfield County		50 - 54	0.9827	0.9816	0.9821	0.9828	0.9835	0.9842	0.9849	0.9856	0.9863	0.9871
Litchfield County		55 - 59	0.9779	0.9758	0.9764	0.9773	0.9782	0.9792	0.9801	0.9810	0.9819	0.9828
Litchfield County		60 - 64	0.9660	0.9714	0.9720	0.9730	0.9740	0.9750	0.9760	0.9770	0.9780	0.9790
Litchfield County		65 - 69	0.9294	0.9413	0.9425	0.9444	0.9463	0.9483	0.9502	0.9521	0.9540	0.9560
Litchfield County		70 - 74	0.8703	0.8855	0.8877	0.8914	0.8951	0.8988	0.9024	0.9061	0.9098	0.9135
Litchfield County		75 - 79	0.7894	0.8201	0.8235	0.8292	0.8349	0.8405	0.8462	0.8519	0.8575	0.8632
Litchfield County		80 - 84	0.6936	0.7196	0.7237	0.7307	0.7376	0.7445	0.7514	0.7583	0.7653	0.7722
Litchfield County		85 +	0.4213	0.4297	0.4344	0.4421	0.4499	0.4577	0.4655	0.4732	0.4810	0.4888
New Haven County	MALE	Births	0.9913	0.9944	0.9946	0.9949	0.9953	0.9956	0.9960	0.9963	0.9967	0.9970
New Haven County		0 - 4	0.9975	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
New Haven County		5 - 9	0.9993	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
New Haven County		10 - 14	0.9974	0.9983	0.9984	0.9984	0.9985	0.9986	0.9986	0.9987	0.9988	0.9988
New Haven County		15 - 19	0.9942	0.9955	0.9956	0.9957	0.9959	0.9960	0.9962	0.9964	0.9965	0.9967
New Haven County		20 - 24	0.9931	0.9929	0.9931	0.9933	0.9936	0.9938	0.9941	0.9943	0.9946	0.9949
New Haven County		25 - 29	0.9915	0.9922	0.9924	0.9927	0.9930	0.9932	0.9935	0.9938	0.9941	0.9944
New Haven County		30 - 34	0.9881	0.9935	0.9937	0.9939	0.9942	0.9944	0.9946	0.9949	0.9951	0.9954
New Haven County		35 - 39	0.9864	0.9912	0.9914	0.9917	0.9920	0.9924	0.9927	0.9930	0.9934	0.9937
New Haven County		40 - 44	0.9821	0.9860	0.9863	0.9869	0.9874	0.9880	0.9885	0.9890	0.9896	0.9901
New Haven County		45 - 49	0.9754	0.9793	0.9798	0.9806	0.9814	0.9822	0.9830	0.9839	0.9847	0.9855
New Haven County		50 - 54	0.9606	0.9682	0.9690	0.9702	0.9714	0.9727	0.9739	0.9751	0.9764	0.9776
New Haven County		55 - 59	0.9284	0.9517	0.9529	0.9547	0.9565	0.9584	0.9602	0.9621	0.9639	0.9657
New Haven County		60 - 64	0.8926	0.9338	0.9352	0.9376	0.9399	0.9422	0.9445	0.9468	0.9491	0.9515
New Haven County		65 - 69	0.8528	0.9028	0.9047	0.9079	0.9111	0.9143	0.9175	0.9206	0.9238	0.9270
New Haven County		70 - 74	0.7856	0.8488	0.8517	0.8566	0.8614	0.8663	0.8711	0.8760	0.8808	0.8857
New Haven County		75 - 79	0.6884	0.7674	0.7718	0.7791	0.7864	0.7938	0.8011	0.8084	0.8157	0.8231
New Haven County		80 - 84	0.5925	0.6651	0.6700	0.6783	0.6866	0.6948	0.7031	0.7114	0.7196	0.7279
New Haven County		85 +	0.3532	0.3751	0.3802	0.3887	0.3973	0.4058	0.4143	0.4228	0.4313	0.4399
New Haven County	FEMALE	Births	0.9936	0.9943	0.9946	0.9949	0.9953	0.9956	0.9960	0.9963	0.9967	0.9970
New Haven County		0 - 4	0.9981	0.9989	0.9990	0.9990	0.9991	0.9991	0.9992	0.9993	0.9993	0.9994
New Haven County		5 - 9	0.9993	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999

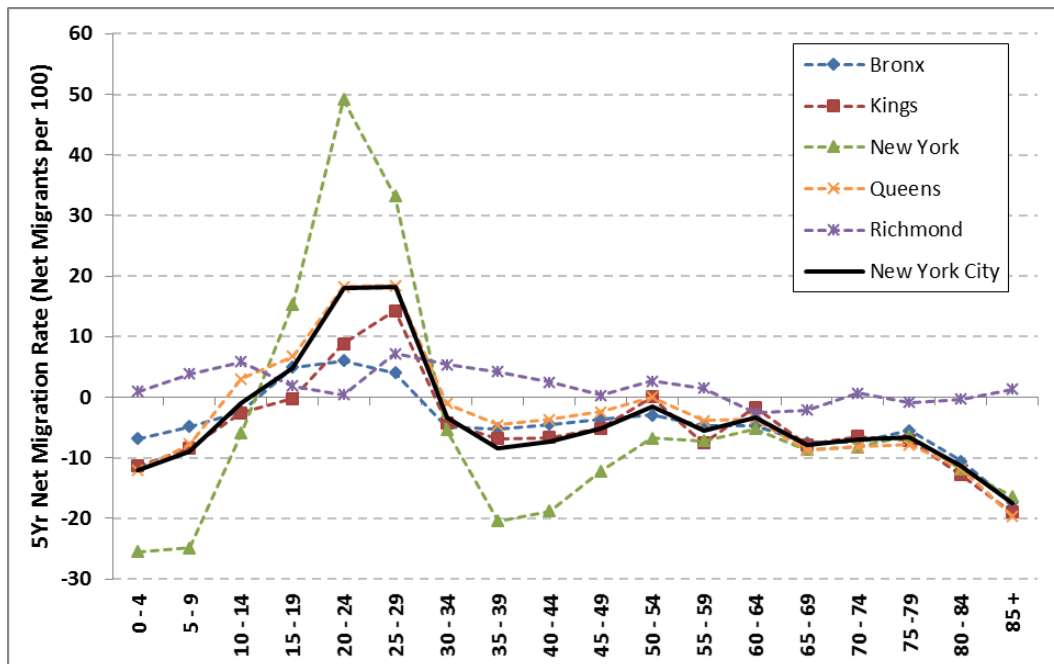
Region	Gender	Age Group	5-Yr Survival Rates									
			Historical		Forecast Assumptions							
			1990	2010	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
New Haven County		10 - 14	0.9988	0.9994	0.9994	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996
New Haven County		15 - 19	0.9983	0.9986	0.9986	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990
New Haven County		20 - 24	0.9973	0.9983	0.9983	0.9984	0.9985	0.9985	0.9986	0.9986	0.9987	0.9988
New Haven County		25 - 29	0.9958	0.9986	0.9986	0.9986	0.9987	0.9987	0.9988	0.9989	0.9989	0.9990
New Haven County		30 - 34	0.9950	0.9973	0.9974	0.9975	0.9976	0.9977	0.9978	0.9979	0.9980	0.9981
New Haven County		35 - 39	0.9936	0.9947	0.9948	0.9950	0.9952	0.9954	0.9956	0.9958	0.9960	0.9962
New Haven County		40 - 44	0.9904	0.9906	0.9908	0.9912	0.9915	0.9919	0.9923	0.9926	0.9930	0.9934
New Haven County		45 - 49	0.9847	0.9866	0.9869	0.9875	0.9880	0.9885	0.9890	0.9896	0.9901	0.9906
New Haven County		50 - 54	0.9747	0.9833	0.9837	0.9843	0.9850	0.9856	0.9863	0.9869	0.9876	0.9882
New Haven County		55 - 59	0.9617	0.9735	0.9741	0.9752	0.9762	0.9772	0.9782	0.9792	0.9802	0.9812
New Haven County		60 - 64	0.9396	0.9538	0.9548	0.9564	0.9580	0.9597	0.9613	0.9629	0.9645	0.9661
New Haven County		65 - 69	0.9058	0.9264	0.9279	0.9303	0.9327	0.9351	0.9375	0.9399	0.9423	0.9448
New Haven County		70 - 74	0.8642	0.8924	0.8945	0.8979	0.9014	0.9048	0.9083	0.9117	0.9152	0.9187
New Haven County		75 -79	0.7933	0.8330	0.8361	0.8414	0.8467	0.8519	0.8572	0.8624	0.8677	0.8730
New Haven County		80 - 84	0.6943	0.7292	0.7332	0.7399	0.7466	0.7533	0.7600	0.7667	0.7733	0.7800
New Haven County		85 +	0.4217	0.4355	0.4401	0.4478	0.4555	0.4632	0.4709	0.4786	0.4863	0.4940

APPENDIX C: MEDIAN 5-YR MIGRATION RATE CHARTS (1990-2010)

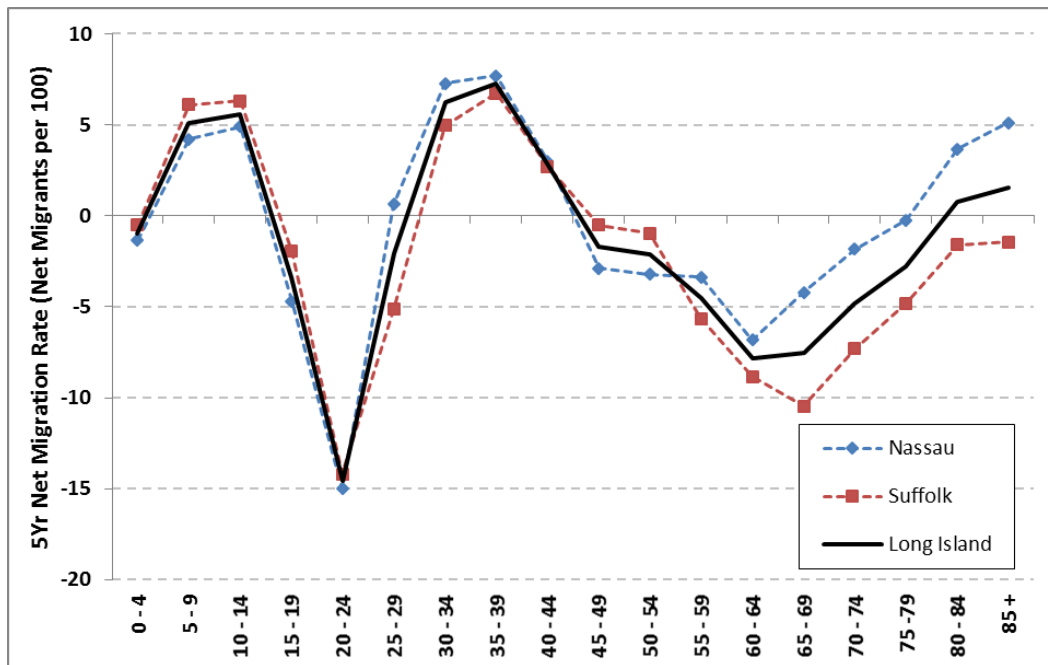
Subregions



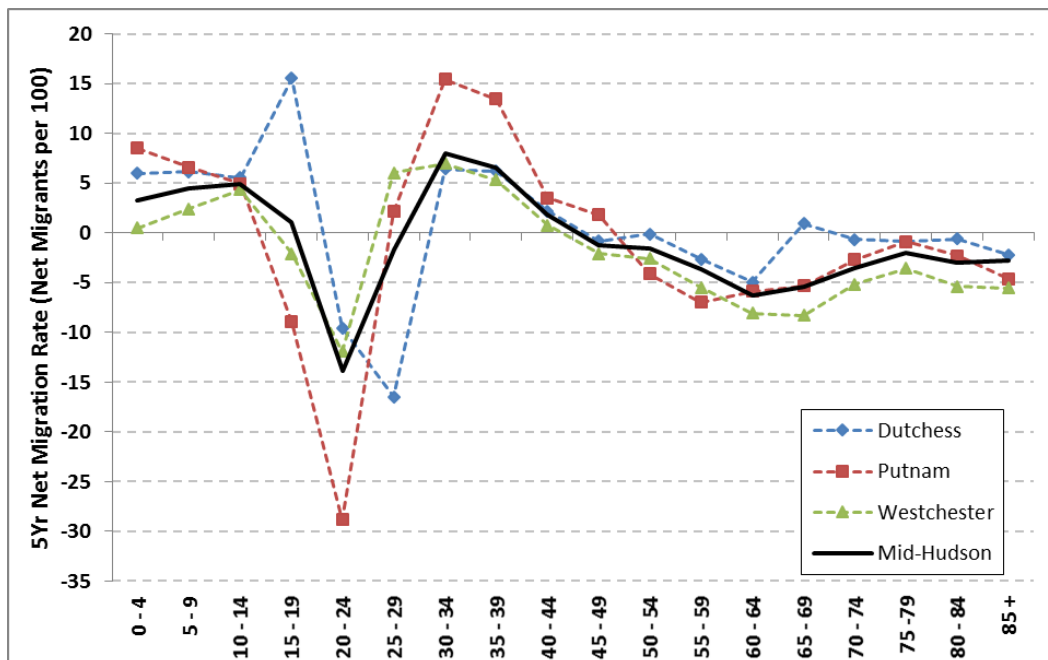
New York City



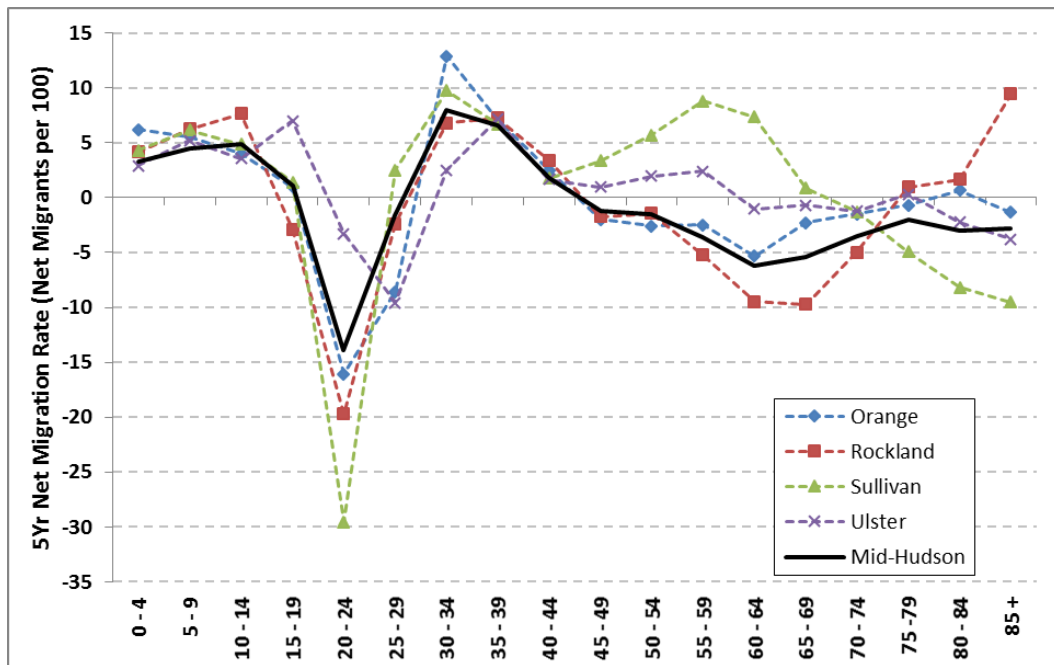
Long Island



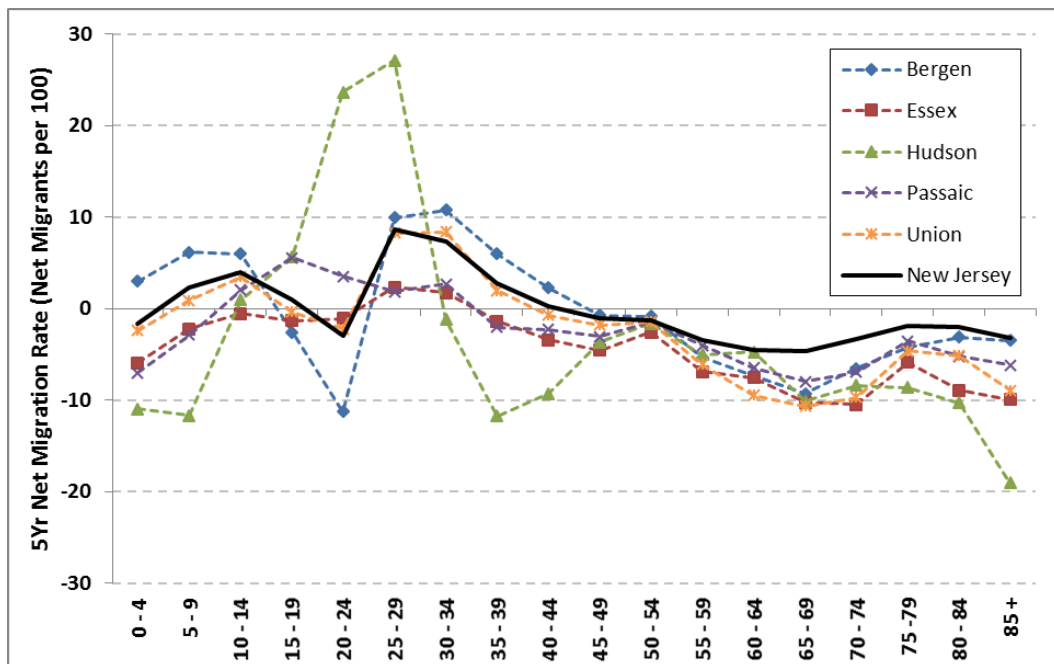
Mid-Hudson (West)



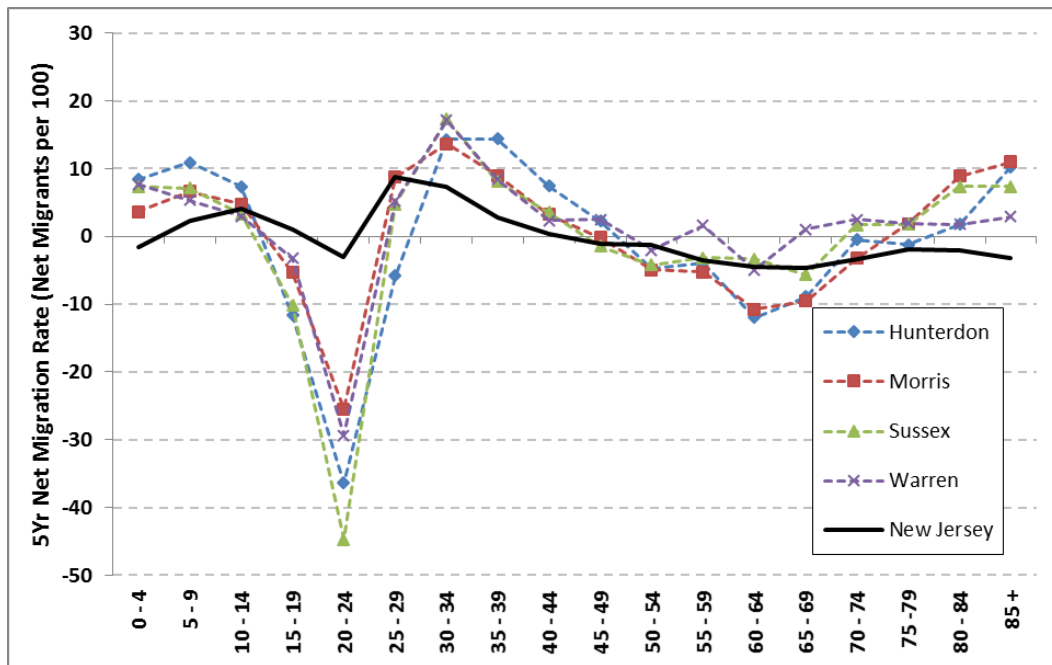
Mid-Hudson (East)



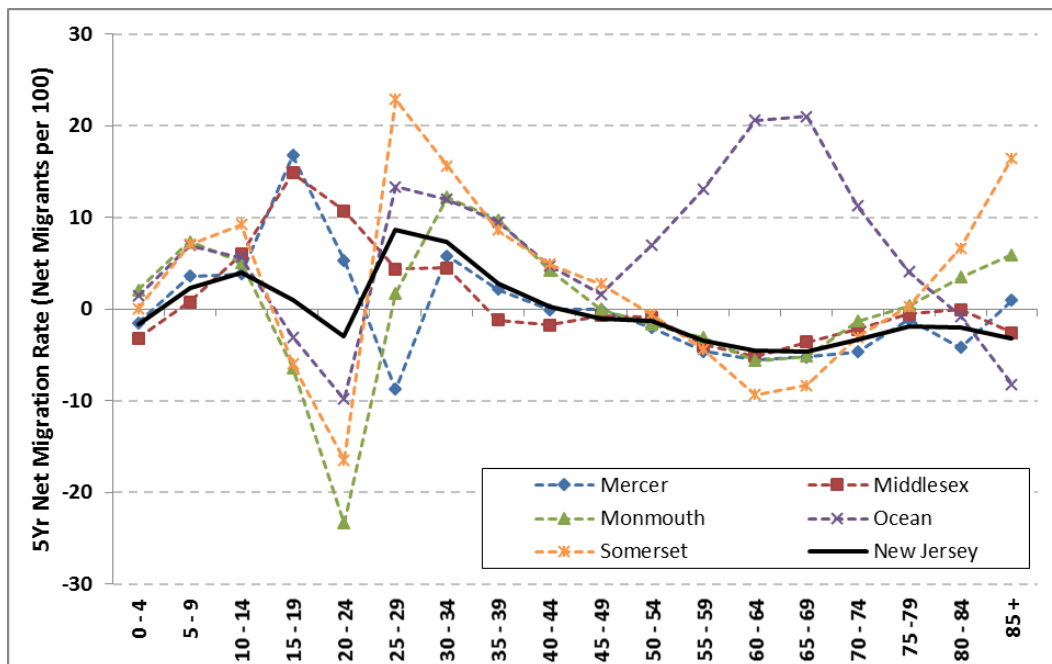
New Jersey (Northeast)



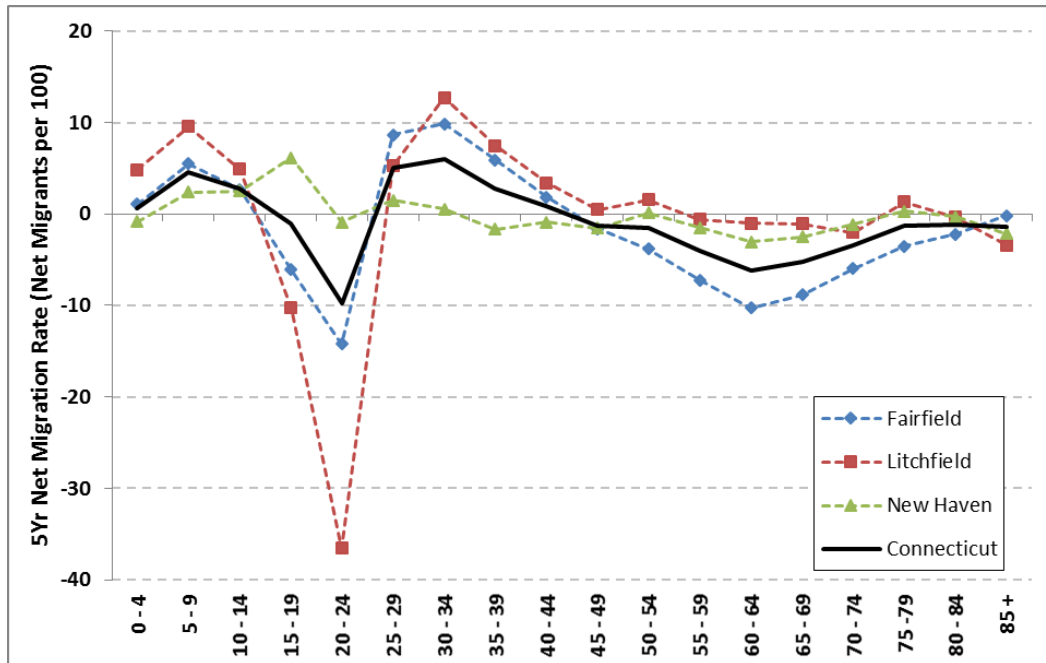
New Jersey (Northwest)



New Jersey (South/Central)



Connecticut



APPENDIX D: LABOR FORCE PARTICIPATION RATES

Region	Gender	Age	Labor Force Participation Rates									
			PUMS Estimates									
			2010	2012	2015	2020	2025	2030	2035	2040	2045	2050
Forecast Region	Females	16 - 19	30.0%	31.4%	29.3%	25.7%	24.2%	24.2%	24.2%	24.2%	24.2%	24.2%
Forecast Region	Females	20 - 24	66.6%	66.8%	66.0%	64.7%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%
Forecast Region	Females	25 - 29	77.0%	79.9%	79.7%	79.3%	79.2%	79.2%	79.2%	79.2%	79.2%	79.2%
Forecast Region	Females	30 - 34	75.9%	77.4%	77.2%	76.8%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%
Forecast Region	Females	35 - 39	75.0%	75.5%	75.1%	74.3%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%
Forecast Region	Females	40 - 44	74.8%	76.6%	76.2%	75.4%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%
Forecast Region	Females	45 - 49	77.6%	77.8%	77.9%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%
Forecast Region	Females	50 - 54	77.6%	77.4%	77.5%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%
Forecast Region	Females	55 - 59	70.7%	71.6%	73.6%	76.7%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%
Forecast Region	Females	60 - 64	55.9%	56.6%	58.3%	61.2%	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%
Forecast Region	Females	65+	14.2%	15.2%	16.9%	19.5%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%
Forecast Region	Males	16 - 19	27.8%	29.0%	27.4%	24.8%	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%
Forecast Region	Males	20 - 24	68.7%	68.0%	66.8%	64.7%	63.8%	63.8%	63.8%	63.8%	63.8%	63.8%
Forecast Region	Males	25 - 29	86.9%	85.7%	85.5%	85.2%	85.1%	85.1%	85.1%	85.1%	85.1%	85.1%
Forecast Region	Males	30 - 34	91.3%	90.4%	90.2%	89.8%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%
Forecast Region	Males	35 - 39	91.9%	91.8%	91.7%	91.6%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%
Forecast Region	Males	40 - 44	90.7%	91.4%	91.3%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%
Forecast Region	Males	45 - 49	89.3%	89.2%	88.9%	88.4%	88.1%	88.1%	88.1%	88.1%	88.1%	88.1%
Forecast Region	Males	50 - 54	86.3%	86.1%	85.8%	85.3%	85.1%	85.1%	85.1%	85.1%	85.1%	85.1%
Forecast Region	Males	55 - 59	81.5%	80.8%	80.7%	80.6%	80.6%	80.6%	80.6%	80.6%	80.6%	80.6%
Forecast Region	Males	60 - 64	64.6%	65.9%	67.2%	69.2%	70.1%	70.1%	70.1%	70.1%	70.1%	70.1%
Forecast Region	Males	65+	24.1%	24.9%	26.0%	27.9%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%
New York City	Females	16 - 19	22.0%	22.3%	20.8%	18.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%
New York City	Females	20 - 24	62.1%	62.8%	62.0%	60.7%	60.2%	60.2%	60.2%	60.2%	60.2%	60.2%
New York City	Females	25 - 29	75.5%	77.7%	77.5%	77.1%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%
New York City	Females	30 - 34	74.7%	78.3%	78.1%	77.7%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%
New York City	Females	35 - 39	73.2%	75.0%	74.5%	73.8%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%
New York City	Females	40 - 44	73.1%	77.4%	76.9%	76.1%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
New York City	Females	45 - 49	75.1%	75.8%	75.9%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%
New York City	Females	50 - 54	74.3%	75.9%	76.0%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%
New York City	Females	55 - 59	66.9%	65.8%	67.6%	70.5%	71.7%	71.7%	71.7%	71.7%	71.7%	71.7%
New York City	Females	60 - 64	51.4%	51.8%	53.4%	56.0%	57.1%	57.1%	57.1%	57.1%	57.1%	57.1%
New York City	Females	65+	11.9%	13.6%	15.1%	17.5%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%
New York City	Males	16 - 19	22.2%	23.0%	21.7%	19.6%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%
New York City	Males	20 - 24	61.7%	62.8%	61.7%	59.7%	59.0%	59.0%	59.0%	59.0%	59.0%	59.0%
New York City	Males	25 - 29	85.2%	84.8%	84.6%	84.3%	84.1%	84.1%	84.1%	84.1%	84.1%	84.1%
New York City	Males	30 - 34	89.9%	89.1%	88.9%	88.5%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%
New York City	Males	35 - 39	89.7%	91.4%	91.3%	91.2%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%
New York City	Males	40 - 44	87.8%	90.3%	90.2%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
New York City	Males	45 - 49	85.0%	85.1%	84.8%	84.3%	84.1%	84.1%	84.1%	84.1%	84.1%	84.1%
New York City	Males	50 - 54	83.5%	81.6%	81.4%	80.9%	80.7%	80.7%	80.7%	80.7%	80.7%	80.7%
New York City	Males	55 - 59	76.2%	75.9%	75.8%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%
New York City	Males	60 - 64	59.4%	61.5%	62.7%	64.6%	65.4%	65.4%	65.4%	65.4%	65.4%	65.4%
New York City	Males	65+	20.3%	21.3%	22.3%	23.9%	24.6%	24.6%	24.6%	24.6%	24.6%	24.6%

Bronx County	Females	16 - 19	24.7%	22.4%	20.9%	18.3%	17.3%	17.3%	17.3%	17.3%	17.3%	17.3%
Bronx County	Females	20 - 24	59.9%	63.0%	62.2%	60.9%	60.4%	60.4%	60.4%	60.4%	60.4%	60.4%
Bronx County	Females	25 - 29	73.2%	71.5%	71.3%	71.0%	70.8%	70.8%	70.8%	70.8%	70.8%	70.8%
Bronx County	Females	30 - 34	67.7%	76.7%	76.5%	76.2%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Bronx County	Females	35 - 39	72.1%	72.4%	72.0%	71.3%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%
Bronx County	Females	40 - 44	71.8%	78.4%	77.9%	77.1%	76.8%	76.8%	76.8%	76.8%	76.8%	76.8%
Bronx County	Females	45 - 49	72.9%	72.6%	72.7%	72.8%	72.8%	72.8%	72.8%	72.8%	72.8%	72.8%
Bronx County	Females	50 - 54	69.3%	69.0%	69.0%	69.1%	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%
Bronx County	Females	55 - 59	63.7%	57.1%	58.6%	61.1%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%
Bronx County	Females	60 - 64	43.4%	47.9%	49.3%	51.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%
Bronx County	Females	65+	10.3%	10.1%	11.2%	13.0%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%
Bronx County	Males	16 - 19	23.7%	25.9%	24.5%	22.1%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%
Bronx County	Males	20 - 24	58.7%	65.3%	64.1%	62.1%	61.3%	61.3%	61.3%	61.3%	61.3%	61.3%
Bronx County	Males	25 - 29	81.9%	81.6%	81.4%	81.1%	80.9%	80.9%	80.9%	80.9%	80.9%	80.9%
Bronx County	Males	30 - 34	84.7%	84.7%	84.5%	84.2%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%
Bronx County	Males	35 - 39	83.2%	85.6%	85.5%	85.4%	85.3%	85.3%	85.3%	85.3%	85.3%	85.3%
Bronx County	Males	40 - 44	82.8%	87.0%	87.0%	86.8%	86.8%	86.8%	86.8%	86.8%	86.8%	86.8%
Bronx County	Males	45 - 49	79.1%	76.4%	76.1%	75.7%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
Bronx County	Males	50 - 54	73.5%	69.5%	69.3%	68.9%	68.7%	68.7%	68.7%	68.7%	68.7%	68.7%
Bronx County	Males	55 - 59	65.9%	69.3%	69.3%	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%
Bronx County	Males	60 - 64	43.3%	57.3%	58.4%	60.2%	60.9%	60.9%	60.9%	60.9%	60.9%	60.9%
Bronx County	Males	65+	18.1%	15.3%	16.0%	17.2%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%
Kings County	Females	16 - 19	17.6%	19.2%	17.9%	15.7%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%
Kings County	Females	20 - 24	58.7%	60.5%	59.8%	58.6%	58.1%	58.1%	58.1%	58.1%	58.1%	58.1%
Kings County	Females	25 - 29	73.6%	77.2%	77.0%	76.6%	76.5%	76.5%	76.5%	76.5%	76.5%	76.5%
Kings County	Females	30 - 34	74.7%	77.1%	76.9%	76.5%	76.4%	76.4%	76.4%	76.4%	76.4%	76.4%
Kings County	Females	35 - 39	71.4%	75.1%	74.6%	73.9%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%
Kings County	Females	40 - 44	76.4%	78.9%	78.5%	77.7%	77.3%	77.3%	77.3%	77.3%	77.3%	77.3%
Kings County	Females	45 - 49	74.8%	74.9%	74.9%	75.0%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%
Kings County	Females	50 - 54	73.8%	75.6%	75.6%	75.7%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Kings County	Females	55 - 59	68.4%	70.0%	71.8%	75.0%	76.2%	76.2%	76.2%	76.2%	76.2%	76.2%
Kings County	Females	60 - 64	53.1%	51.2%	52.7%	55.4%	56.4%	56.4%	56.4%	56.4%	56.4%	56.4%
Kings County	Females	65+	9.0%	12.5%	13.8%	16.0%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%
Kings County	Males	16 - 19	17.6%	17.4%	16.4%	14.8%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%
Kings County	Males	20 - 24	57.7%	61.9%	60.8%	58.9%	58.1%	58.1%	58.1%	58.1%	58.1%	58.1%
Kings County	Males	25 - 29	83.5%	83.7%	83.5%	83.1%	83.0%	83.0%	83.0%	83.0%	83.0%	83.0%
Kings County	Males	30 - 34	89.4%	89.2%	88.9%	88.6%	88.5%	88.5%	88.5%	88.5%	88.5%	88.5%
Kings County	Males	35 - 39	88.1%	91.9%	91.8%	91.6%	91.6%	91.6%	91.6%	91.6%	91.6%	91.6%
Kings County	Males	40 - 44	86.9%	90.6%	90.6%	90.4%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%
Kings County	Males	45 - 49	84.6%	85.0%	84.7%	84.2%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%
Kings County	Males	50 - 54	83.9%	81.8%	81.6%	81.1%	80.9%	80.9%	80.9%	80.9%	80.9%	80.9%
Kings County	Males	55 - 59	76.7%	75.6%	75.5%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%
Kings County	Males	60 - 64	61.9%	62.4%	63.6%	65.6%	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%
Kings County	Males	65+	15.6%	15.9%	16.6%	17.8%	18.3%	18.3%	18.3%	18.3%	18.3%	18.3%
New York County	Females	16 - 19	23.2%	19.2%	17.9%	15.7%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%
New York County	Females	20 - 24	67.1%	63.5%	62.7%	61.4%	60.9%	60.9%	60.9%	60.9%	60.9%	60.9%
New York County	Females	25 - 29	81.6%	84.9%	84.6%	84.2%	84.1%	84.1%	84.1%	84.1%	84.1%	84.1%
New York County	Females	30 - 34	85.0%	86.7%	86.5%	86.1%	85.9%	85.9%	85.9%	85.9%	85.9%	85.9%
New York County	Females	35 - 39	77.1%	83.2%	82.7%	81.8%	81.5%	81.5%	81.5%	81.5%	81.5%	81.5%
New York County	Females	40 - 44	72.3%	79.4%	78.9%	78.1%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%

New York County	Females	45 - 49	75.8%	82.4%	82.5%	82.6%	82.7%	82.7%	82.7%	82.7%	82.7%	82.7%
New York County	Females	50 - 54	74.9%	80.5%	80.6%	80.7%	80.7%	80.7%	80.7%	80.7%	80.7%	80.7%
New York County	Females	55 - 59	65.8%	65.5%	67.2%	70.1%	71.3%	71.3%	71.3%	71.3%	71.3%	71.3%
New York County	Females	60 - 64	58.1%	51.7%	53.3%	55.9%	57.0%	57.0%	57.0%	57.0%	57.0%	57.0%
New York County	Females	65+	19.7%	20.0%	22.1%	25.6%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
New York County	Males	16 - 19	24.5%	23.3%	22.0%	19.9%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
New York County	Males	20 - 24	62.8%	59.6%	58.5%	56.7%	56.0%	56.0%	56.0%	56.0%	56.0%	56.0%
New York County	Males	25 - 29	86.6%	85.4%	85.2%	84.8%	84.7%	84.7%	84.7%	84.7%	84.7%	84.7%
New York County	Males	30 - 34	90.3%	88.6%	88.4%	88.0%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%
New York County	Males	35 - 39	91.8%	92.4%	92.3%	92.2%	92.1%	92.1%	92.1%	92.1%	92.1%	92.1%
New York County	Males	40 - 44	89.0%	91.3%	91.2%	91.1%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
New York County	Males	45 - 49	84.1%	85.1%	84.8%	84.3%	84.1%	84.1%	84.1%	84.1%	84.1%	84.1%
New York County	Males	50 - 54	82.7%	83.1%	82.9%	82.4%	82.2%	82.2%	82.2%	82.2%	82.2%	82.2%
New York County	Males	55 - 59	76.9%	76.2%	76.2%	76.1%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%
New York County	Males	60 - 64	64.9%	63.0%	64.1%	66.1%	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%
New York County	Males	65+	29.5%	31.6%	33.0%	35.5%	36.4%	36.4%	36.4%	36.4%	36.4%	36.4%
Queens County	Females	16 - 19	26.3%	25.9%	24.1%	21.2%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Queens County	Females	20 - 24	63.8%	65.0%	64.2%	62.9%	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%
Queens County	Females	25 - 29	73.9%	72.8%	72.6%	72.3%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%
Queens County	Females	30 - 34	71.1%	75.2%	75.0%	74.6%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%
Queens County	Females	35 - 39	72.9%	71.6%	71.2%	70.5%	70.2%	70.2%	70.2%	70.2%	70.2%	70.2%
Queens County	Females	40 - 44	72.1%	75.0%	74.6%	73.8%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%
Queens County	Females	45 - 49	76.3%	75.6%	75.6%	75.7%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Queens County	Females	50 - 54	77.8%	75.7%	75.8%	75.9%	75.9%	75.9%	75.9%	75.9%	75.9%	75.9%
Queens County	Females	55 - 59	69.9%	68.6%	70.4%	73.5%	74.7%	74.7%	74.7%	74.7%	74.7%	74.7%
Queens County	Females	60 - 64	50.9%	54.8%	56.5%	59.3%	60.5%	60.5%	60.5%	60.5%	60.5%	60.5%
Queens County	Females	65+	10.6%	12.9%	14.3%	16.6%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%
Queens County	Males	16 - 19	26.6%	25.5%	24.1%	21.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Queens County	Males	20 - 24	68.0%	66.4%	65.2%	63.1%	62.3%	62.3%	62.3%	62.3%	62.3%	62.3%
Queens County	Males	25 - 29	87.0%	88.1%	87.9%	87.5%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%
Queens County	Males	30 - 34	93.3%	91.7%	91.5%	91.2%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
Queens County	Males	35 - 39	93.1%	93.2%	93.1%	93.0%	92.9%	92.9%	92.9%	92.9%	92.9%	92.9%
Queens County	Males	40 - 44	90.8%	91.3%	91.2%	91.1%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
Queens County	Males	45 - 49	89.3%	89.6%	89.3%	88.7%	88.5%	88.5%	88.5%	88.5%	88.5%	88.5%
Queens County	Males	50 - 54	89.2%	86.2%	85.9%	85.4%	85.2%	85.2%	85.2%	85.2%	85.2%	85.2%
Queens County	Males	55 - 59	80.3%	79.1%	79.0%	78.9%	78.9%	78.9%	78.9%	78.9%	78.9%	78.9%
Queens County	Males	60 - 64	62.3%	64.3%	65.5%	67.5%	68.3%	68.3%	68.3%	68.3%	68.3%	68.3%
Queens County	Males	65+	20.1%	22.3%	23.3%	25.1%	25.7%	25.7%	25.7%	25.7%	25.7%	25.7%
Richmond County	Females	16 - 19	15.1%	31.1%	28.9%	25.4%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Richmond County	Females	20 - 24	58.2%	61.4%	60.6%	59.4%	58.9%	58.9%	58.9%	58.9%	58.9%	58.9%
Richmond County	Females	25 - 29	67.1%	81.8%	81.6%	81.2%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%
Richmond County	Females	30 - 34	68.3%	65.0%	64.9%	64.6%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%
Richmond County	Females	35 - 39	73.0%	67.2%	66.8%	66.1%	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%
Richmond County	Females	40 - 44	68.0%	71.0%	70.6%	69.9%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%
Richmond County	Females	45 - 49	75.7%	72.2%	72.2%	72.3%	72.4%	72.4%	72.4%	72.4%	72.4%	72.4%
Richmond County	Females	50 - 54	72.4%	84.5%	84.6%	84.7%	84.8%	84.8%	84.8%	84.8%	84.8%	84.8%
Richmond County	Females	55 - 59	58.3%	54.4%	55.9%	58.3%	59.3%	59.3%	59.3%	59.3%	59.3%	59.3%
Richmond County	Females	60 - 64	43.0%	51.2%	52.8%	55.5%	56.5%	56.5%	56.5%	56.5%	56.5%	56.5%
Richmond County	Females	65+	9.3%	8.5%	9.4%	10.9%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
Richmond County	Males	16 - 19	17.7%	28.8%	27.2%	24.6%	23.5%	23.5%	23.5%	23.5%	23.5%	23.5%

Richmond County	Males	20 - 24	58.6%	54.0%	53.0%	51.3%	50.7%	50.7%	50.7%	50.7%	50.7%	50.7%
Richmond County	Males	25 - 29	88.4%	80.5%	80.3%	79.9%	79.8%	79.8%	79.8%	79.8%	79.8%	79.8%
Richmond County	Males	30 - 34	84.9%	88.9%	88.6%	88.3%	88.2%	88.2%	88.2%	88.2%	88.2%	88.2%
Richmond County	Males	35 - 39	86.6%	92.7%	92.6%	92.5%	92.4%	92.4%	92.4%	92.4%	92.4%	92.4%
Richmond County	Males	40 - 44	88.4%	86.3%	86.2%	86.1%	86.0%	86.0%	86.0%	86.0%	86.0%	86.0%
Richmond County	Males	45 - 49	85.8%	87.6%	87.3%	86.8%	86.6%	86.6%	86.6%	86.6%	86.6%	86.6%
Richmond County	Males	50 - 54	81.8%	84.9%	84.6%	84.1%	83.9%	83.9%	83.9%	83.9%	83.9%	83.9%
Richmond County	Males	55 - 59	75.4%	76.5%	76.4%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%
Richmond County	Males	60 - 64	57.0%	52.0%	53.0%	54.6%	55.2%	55.2%	55.2%	55.2%	55.2%	55.2%
Richmond County	Males	65+	16.2%	19.7%	20.6%	22.1%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%
Long Island	Females	16 - 19	33.8%	32.2%	30.0%	26.4%	24.9%	24.9%	24.9%	24.9%	24.9%	24.9%
Long Island	Females	20 - 24	66.7%	67.1%	66.3%	65.0%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%
Long Island	Females	25 - 29	78.9%	84.4%	84.1%	83.7%	83.6%	83.6%	83.6%	83.6%	83.6%	83.6%
Long Island	Females	30 - 34	78.5%	72.3%	72.1%	71.7%	71.6%	71.6%	71.6%	71.6%	71.6%	71.6%
Long Island	Females	35 - 39	76.5%	75.9%	75.5%	74.7%	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%
Long Island	Females	40 - 44	74.5%	75.5%	75.0%	74.3%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%
Long Island	Females	45 - 49	77.6%	79.8%	79.9%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Long Island	Females	50 - 54	80.9%	77.2%	77.2%	77.3%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%
Long Island	Females	55 - 59	72.3%	75.1%	77.1%	80.5%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%
Long Island	Females	60 - 64	56.5%	58.0%	59.8%	62.8%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%
Long Island	Females	65+	15.0%	16.3%	18.0%	20.9%	22.1%	22.1%	22.1%	22.1%	22.1%	22.1%
Long Island	Males	16 - 19	27.1%	27.8%	26.3%	23.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%
Long Island	Males	20 - 24	74.2%	70.7%	69.4%	67.2%	66.3%	66.3%	66.3%	66.3%	66.3%	66.3%
Long Island	Males	25 - 29	90.6%	88.2%	88.0%	87.7%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%
Long Island	Males	30 - 34	94.3%	91.7%	91.5%	91.1%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
Long Island	Males	35 - 39	95.2%	91.4%	91.3%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%
Long Island	Males	40 - 44	90.7%	93.4%	93.3%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%
Long Island	Males	45 - 49	91.3%	90.7%	90.4%	89.8%	89.6%	89.6%	89.6%	89.6%	89.6%	89.6%
Long Island	Males	50 - 54	88.1%	89.7%	89.4%	88.9%	88.7%	88.7%	88.7%	88.7%	88.7%	88.7%
Long Island	Males	55 - 59	83.4%	80.9%	80.8%	80.7%	80.7%	80.7%	80.7%	80.7%	80.7%	80.7%
Long Island	Males	60 - 64	65.1%	66.0%	67.2%	69.3%	70.1%	70.1%	70.1%	70.1%	70.1%	70.1%
Long Island	Males	65+	24.6%	25.2%	26.4%	28.3%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%
Nassau County	Females	16 - 19	28.0%	27.0%	25.2%	22.1%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Nassau County	Females	20 - 24	58.5%	65.6%	64.8%	63.5%	63.0%	63.0%	63.0%	63.0%	63.0%	63.0%
Nassau County	Females	25 - 29	78.5%	85.3%	85.1%	84.7%	84.5%	84.5%	84.5%	84.5%	84.5%	84.5%
Nassau County	Females	30 - 34	78.0%	72.0%	71.8%	71.5%	71.3%	71.3%	71.3%	71.3%	71.3%	71.3%
Nassau County	Females	35 - 39	74.8%	76.8%	76.4%	75.6%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Nassau County	Females	40 - 44	71.6%	76.9%	76.4%	75.6%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Nassau County	Females	45 - 49	76.4%	80.9%	81.0%	81.1%	81.2%	81.2%	81.2%	81.2%	81.2%	81.2%
Nassau County	Females	50 - 54	81.5%	78.1%	78.2%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%
Nassau County	Females	55 - 59	74.7%	75.3%	77.3%	80.7%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%
Nassau County	Females	60 - 64	57.9%	59.7%	61.6%	64.7%	65.9%	65.9%	65.9%	65.9%	65.9%	65.9%
Nassau County	Females	65+	15.3%	16.1%	17.8%	20.6%	21.8%	21.8%	21.8%	21.8%	21.8%	21.8%
Nassau County	Males	16 - 19	19.8%	24.6%	23.2%	21.0%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%
Nassau County	Males	20 - 24	71.7%	72.9%	71.5%	69.3%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%
Nassau County	Males	25 - 29	91.3%	91.6%	91.4%	91.0%	90.9%	90.9%	90.9%	90.9%	90.9%	90.9%
Nassau County	Males	30 - 34	94.6%	89.8%	89.6%	89.2%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%
Nassau County	Males	35 - 39	94.5%	91.1%	91.0%	90.9%	90.8%	90.8%	90.8%	90.8%	90.8%	90.8%
Nassau County	Males	40 - 44	91.9%	91.8%	91.7%	91.6%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%
Nassau County	Males	45 - 49	92.0%	91.3%	91.0%	90.5%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%

Nassau County	Males	50 - 54	89.1%	91.0%	90.6%	90.1%	89.9%	89.9%	89.9%	89.9%	89.9%	89.9%
Nassau County	Males	55 - 59	84.9%	81.6%	81.6%	81.5%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Nassau County	Males	60 - 64	72.8%	66.9%	68.2%	70.3%	71.1%	71.1%	71.1%	71.1%	71.1%	71.1%
Nassau County	Males	65+	25.7%	27.1%	28.4%	30.4%	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%
Suffolk County	Females	16 - 19	38.8%	36.9%	34.3%	30.1%	28.4%	28.4%	28.4%	28.4%	28.4%	28.4%
Suffolk County	Females	20 - 24	74.0%	68.4%	67.6%	66.2%	65.7%	65.7%	65.7%	65.7%	65.7%	65.7%
Suffolk County	Females	25 - 29	79.3%	83.5%	83.2%	82.8%	82.7%	82.7%	82.7%	82.7%	82.7%	82.7%
Suffolk County	Females	30 - 34	79.0%	72.5%	72.3%	71.9%	71.8%	71.8%	71.8%	71.8%	71.8%	71.8%
Suffolk County	Females	35 - 39	77.9%	75.2%	74.7%	74.0%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%
Suffolk County	Females	40 - 44	77.1%	74.3%	73.8%	73.1%	72.8%	72.8%	72.8%	72.8%	72.8%	72.8%
Suffolk County	Females	45 - 49	78.6%	78.8%	78.8%	78.9%	79.0%	79.0%	79.0%	79.0%	79.0%	79.0%
Suffolk County	Females	50 - 54	80.3%	76.3%	76.4%	76.5%	76.5%	76.5%	76.5%	76.5%	76.5%	76.5%
Suffolk County	Females	55 - 59	70.0%	75.0%	77.0%	80.3%	81.6%	81.6%	81.6%	81.6%	81.6%	81.6%
Suffolk County	Females	60 - 64	55.1%	56.1%	57.9%	60.7%	61.9%	61.9%	61.9%	61.9%	61.9%	61.9%
Suffolk County	Females	65+	14.7%	16.5%	18.3%	21.2%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%
Suffolk County	Males	16 - 19	33.0%	30.6%	28.9%	26.1%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Suffolk County	Males	20 - 24	76.5%	68.9%	67.6%	65.5%	64.7%	64.7%	64.7%	64.7%	64.7%	64.7%
Suffolk County	Males	25 - 29	89.9%	85.1%	84.9%	84.6%	84.5%	84.5%	84.5%	84.5%	84.5%	84.5%
Suffolk County	Males	30 - 34	94.1%	93.3%	93.1%	92.7%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%
Suffolk County	Males	35 - 39	95.7%	91.6%	91.5%	91.3%	91.3%	91.3%	91.3%	91.3%	91.3%	91.3%
Suffolk County	Males	40 - 44	89.7%	94.6%	94.5%	94.3%	94.3%	94.3%	94.3%	94.3%	94.3%	94.3%
Suffolk County	Males	45 - 49	90.7%	90.1%	89.8%	89.3%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%
Suffolk County	Males	50 - 54	87.3%	88.6%	88.3%	87.8%	87.6%	87.6%	87.6%	87.6%	87.6%	87.6%
Suffolk County	Males	55 - 59	82.1%	80.2%	80.2%	80.1%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Suffolk County	Males	60 - 64	56.8%	64.9%	66.2%	68.2%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%
Suffolk County	Males	65+	23.6%	23.4%	24.5%	26.3%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Mid-Hudson	Females	16 - 19	34.9%	36.4%	33.9%	29.7%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%
Mid-Hudson	Females	20 - 24	68.6%	67.7%	66.9%	65.5%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%
Mid-Hudson	Females	25 - 29	76.2%	81.1%	80.9%	80.5%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%
Mid-Hudson	Females	30 - 34	77.0%	76.9%	76.7%	76.4%	76.2%	76.2%	76.2%	76.2%	76.2%	76.2%
Mid-Hudson	Females	35 - 39	76.5%	71.1%	70.7%	70.0%	69.7%	69.7%	69.7%	69.7%	69.7%	69.7%
Mid-Hudson	Females	40 - 44	76.2%	79.8%	79.4%	78.6%	78.2%	78.2%	78.2%	78.2%	78.2%	78.2%
Mid-Hudson	Females	45 - 49	79.1%	77.4%	77.5%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%
Mid-Hudson	Females	50 - 54	79.9%	77.7%	77.8%	77.9%	77.9%	77.9%	77.9%	77.9%	77.9%	77.9%
Mid-Hudson	Females	55 - 59	72.4%	78.0%	80.1%	83.6%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Mid-Hudson	Females	60 - 64	55.3%	60.2%	62.1%	65.2%	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%
Mid-Hudson	Females	65+	16.1%	18.0%	19.9%	23.0%	24.3%	24.3%	24.3%	24.3%	24.3%	24.3%
Mid-Hudson	Males	16 - 19	31.4%	32.7%	30.9%	27.9%	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%
Mid-Hudson	Males	20 - 24	74.4%	73.0%	71.7%	69.4%	68.5%	68.5%	68.5%	68.5%	68.5%	68.5%
Mid-Hudson	Males	25 - 29	85.6%	83.2%	83.0%	82.7%	82.6%	82.6%	82.6%	82.6%	82.6%	82.6%
Mid-Hudson	Males	30 - 34	91.3%	90.3%	90.1%	89.7%	89.6%	89.6%	89.6%	89.6%	89.6%	89.6%
Mid-Hudson	Males	35 - 39	91.1%	89.1%	89.1%	88.9%	88.8%	88.8%	88.8%	88.8%	88.8%	88.8%
Mid-Hudson	Males	40 - 44	91.0%	87.7%	87.6%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%
Mid-Hudson	Males	45 - 49	91.1%	89.8%	89.5%	88.9%	88.7%	88.7%	88.7%	88.7%	88.7%	88.7%
Mid-Hudson	Males	50 - 54	86.0%	85.2%	84.9%	84.4%	84.2%	84.2%	84.2%	84.2%	84.2%	84.2%
Mid-Hudson	Males	55 - 59	80.9%	84.8%	84.7%	84.6%	84.6%	84.6%	84.6%	84.6%	84.6%	84.6%
Mid-Hudson	Males	60 - 64	65.2%	68.7%	70.0%	72.1%	73.0%	73.0%	73.0%	73.0%	73.0%	73.0%
Mid-Hudson	Males	65+	27.0%	27.9%	29.1%	31.3%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%
Dutchess County	Females	16 - 19	45.5%	43.6%	40.6%	35.7%	33.7%	33.7%	33.7%	33.7%	33.7%	33.7%
Dutchess County	Females	20 - 24	63.3%	73.8%	72.9%	71.4%	70.8%	70.8%	70.8%	70.8%	70.8%	70.8%

Dutchess County	Females	25 - 29	72.0%	84.8%	84.6%	84.2%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%
Dutchess County	Females	30 - 34	85.4%	81.6%	81.4%	81.0%	80.8%	80.8%	80.8%	80.8%	80.8%	80.8%
Dutchess County	Females	35 - 39	82.6%	76.5%	76.1%	75.3%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Dutchess County	Females	40 - 44	72.6%	86.2%	85.6%	84.8%	84.4%	84.4%	84.4%	84.4%	84.4%	84.4%
Dutchess County	Females	45 - 49	81.6%	83.2%	83.3%	83.4%	83.4%	83.4%	83.4%	83.4%	83.4%	83.4%
Dutchess County	Females	50 - 54	81.0%	73.5%	73.6%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%
Dutchess County	Females	55 - 59	72.6%	77.0%	79.0%	82.4%	83.8%	83.8%	83.8%	83.8%	83.8%	83.8%
Dutchess County	Females	60 - 64	49.3%	53.1%	54.8%	57.5%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%
Dutchess County	Females	65+	13.6%	20.0%	22.1%	25.6%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Dutchess County	Males	16 - 19	37.8%	33.1%	31.3%	28.3%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%
Dutchess County	Males	20 - 24	77.6%	69.8%	68.6%	66.4%	65.5%	65.5%	65.5%	65.5%	65.5%	65.5%
Dutchess County	Males	25 - 29	82.2%	94.2%	94.0%	93.6%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%
Dutchess County	Males	30 - 34	88.8%	81.8%	81.6%	81.3%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%
Dutchess County	Males	35 - 39	88.6%	84.5%	84.4%	84.3%	84.2%	84.2%	84.2%	84.2%	84.2%	84.2%
Dutchess County	Males	40 - 44	87.1%	82.2%	82.1%	82.0%	81.9%	81.9%	81.9%	81.9%	81.9%	81.9%
Dutchess County	Males	45 - 49	92.2%	84.9%	84.6%	84.1%	83.9%	83.9%	83.9%	83.9%	83.9%	83.9%
Dutchess County	Males	50 - 54	85.3%	88.8%	88.5%	88.0%	87.8%	87.8%	87.8%	87.8%	87.8%	87.8%
Dutchess County	Males	55 - 59	77.9%	85.1%	85.0%	84.9%	84.9%	84.9%	84.9%	84.9%	84.9%	84.9%
Dutchess County	Males	60 - 64	58.4%	67.6%	68.9%	71.0%	71.9%	71.9%	71.9%	71.9%	71.9%	71.9%
Dutchess County	Males	65+	22.8%	26.4%	27.6%	29.7%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%
Orange County	Females	16 - 19	42.0%	31.8%	29.7%	26.0%	24.6%	24.6%	24.6%	24.6%	24.6%	24.6%
Orange County	Females	20 - 24	70.9%	74.5%	73.6%	72.1%	71.5%	71.5%	71.5%	71.5%	71.5%	71.5%
Orange County	Females	25 - 29	81.3%	76.4%	76.2%	75.9%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%
Orange County	Females	30 - 34	71.7%	82.2%	82.0%	81.6%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Orange County	Females	35 - 39	81.3%	73.1%	72.7%	72.0%	71.7%	71.7%	71.7%	71.7%	71.7%	71.7%
Orange County	Females	40 - 44	76.5%	76.2%	75.7%	75.0%	74.7%	74.7%	74.7%	74.7%	74.7%	74.7%
Orange County	Females	45 - 49	74.2%	78.1%	78.2%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%
Orange County	Females	50 - 54	77.9%	86.5%	86.6%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%
Orange County	Females	55 - 59	76.8%	74.2%	76.2%	79.5%	80.8%	80.8%	80.8%	80.8%	80.8%	80.8%
Orange County	Females	60 - 64	50.2%	62.5%	64.4%	67.6%	68.9%	68.9%	68.9%	68.9%	68.9%	68.9%
Orange County	Females	65+	11.5%	17.4%	19.2%	22.3%	23.5%	23.5%	23.5%	23.5%	23.5%	23.5%
Orange County	Males	16 - 19	32.5%	46.1%	43.6%	39.4%	37.7%	37.7%	37.7%	37.7%	37.7%	37.7%
Orange County	Males	20 - 24	73.9%	81.2%	79.7%	77.2%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%
Orange County	Males	25 - 29	90.9%	87.3%	87.1%	86.7%	86.6%	86.6%	86.6%	86.6%	86.6%	86.6%
Orange County	Males	30 - 34	91.1%	80.6%	80.4%	80.1%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Orange County	Males	35 - 39	88.5%	86.1%	86.0%	85.8%	85.8%	85.8%	85.8%	85.8%	85.8%	85.8%
Orange County	Males	40 - 44	86.8%	84.5%	84.4%	84.3%	84.2%	84.2%	84.2%	84.2%	84.2%	84.2%
Orange County	Males	45 - 49	88.7%	88.7%	88.4%	87.9%	87.7%	87.7%	87.7%	87.7%	87.7%	87.7%
Orange County	Males	50 - 54	79.1%	81.8%	81.5%	81.0%	80.9%	80.9%	80.9%	80.9%	80.9%	80.9%
Orange County	Males	55 - 59	78.3%	85.5%	85.5%	85.4%	85.3%	85.3%	85.3%	85.3%	85.3%	85.3%
Orange County	Males	60 - 64	62.7%	64.0%	65.2%	67.2%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%
Orange County	Males	65+	22.7%	20.3%	21.3%	22.8%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%
Putnam County	Females	16 - 19	30.5%	29.6%	27.6%	24.2%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%
Putnam County	Females	20 - 24	66.4%	62.8%	62.0%	60.8%	60.3%	60.3%	60.3%	60.3%	60.3%	60.3%
Putnam County	Females	25 - 29	75.6%	80.4%	80.2%	79.8%	79.7%	79.7%	79.7%	79.7%	79.7%	79.7%
Putnam County	Females	30 - 34	80.7%	75.4%	75.2%	74.9%	74.7%	74.7%	74.7%	74.7%	74.7%	74.7%
Putnam County	Females	35 - 39	74.4%	70.4%	69.9%	69.2%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%
Putnam County	Females	40 - 44	76.8%	78.6%	78.1%	77.3%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%
Putnam County	Females	45 - 49	80.7%	76.5%	76.6%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%
Putnam County	Females	50 - 54	80.9%	79.2%	79.3%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%

Putnam County	Females	55 - 59	74.0%	79.3%	81.5%	85.0%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%
Putnam County	Females	60 - 64	56.2%	60.3%	62.2%	65.3%	66.6%	66.6%	66.6%	66.6%	66.6%	66.6%
Putnam County	Females	65+	17.1%	16.8%	18.5%	21.5%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%
Putnam County	Males	16 - 19	29.2%	28.4%	26.8%	24.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%
Putnam County	Males	20 - 24	74.9%	73.0%	71.6%	69.4%	68.5%	68.5%	68.5%	68.5%	68.5%	68.5%
Putnam County	Males	25 - 29	85.9%	85.6%	85.4%	85.0%	84.9%	84.9%	84.9%	84.9%	84.9%	84.9%
Putnam County	Males	30 - 34	92.2%	95.2%	95.0%	94.6%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%
Putnam County	Males	35 - 39	95.1%	95.0%	94.9%	94.8%	94.7%	94.7%	94.7%	94.7%	94.7%	94.7%
Putnam County	Males	40 - 44	94.0%	90.9%	90.9%	90.7%	90.6%	90.6%	90.6%	90.6%	90.6%	90.6%
Putnam County	Males	45 - 49	93.0%	90.7%	90.4%	89.9%	89.6%	89.6%	89.6%	89.6%	89.6%	89.6%
Putnam County	Males	50 - 54	90.3%	86.6%	86.3%	85.8%	85.6%	85.6%	85.6%	85.6%	85.6%	85.6%
Putnam County	Males	55 - 59	83.7%	86.1%	86.0%	85.9%	85.9%	85.9%	85.9%	85.9%	85.9%	85.9%
Putnam County	Males	60 - 64	71.8%	69.5%	70.8%	72.9%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%
Putnam County	Males	65+	29.5%	30.2%	31.5%	33.8%	34.8%	34.8%	34.8%	34.8%	34.8%	34.8%
Rockland County	Females	16 - 19	29.0%	49.6%	46.2%	40.5%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%
Rockland County	Females	20 - 24	66.7%	64.4%	63.6%	62.3%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%
Rockland County	Females	25 - 29	81.5%	89.6%	89.3%	88.9%	88.8%	88.8%	88.8%	88.8%	88.8%	88.8%
Rockland County	Females	30 - 34	67.1%	72.9%	72.6%	72.3%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%
Rockland County	Females	35 - 39	68.6%	67.3%	66.9%	66.2%	65.9%	65.9%	65.9%	65.9%	65.9%	65.9%
Rockland County	Females	40 - 44	73.1%	80.0%	79.5%	78.7%	78.4%	78.4%	78.4%	78.4%	78.4%	78.4%
Rockland County	Females	45 - 49	76.3%	77.3%	77.4%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%
Rockland County	Females	50 - 54	87.9%	74.3%	74.3%	74.4%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%
Rockland County	Females	55 - 59	64.4%	81.6%	83.8%	87.4%	88.9%	88.9%	88.9%	88.9%	88.9%	88.9%
Rockland County	Females	60 - 64	58.8%	68.7%	70.8%	74.4%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Rockland County	Females	65+	19.4%	18.8%	20.8%	24.1%	25.5%	25.5%	25.5%	25.5%	25.5%	25.5%
Rockland County	Males	16 - 19	19.6%	23.5%	22.2%	20.1%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%
Rockland County	Males	20 - 24	71.8%	66.8%	65.6%	63.5%	62.7%	62.7%	62.7%	62.7%	62.7%	62.7%
Rockland County	Males	25 - 29	90.9%	76.2%	76.0%	75.7%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%
Rockland County	Males	30 - 34	96.6%	95.2%	95.0%	94.6%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%
Rockland County	Males	35 - 39	88.6%	91.4%	91.3%	91.2%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%
Rockland County	Males	40 - 44	96.5%	93.5%	93.4%	93.3%	93.2%	93.2%	93.2%	93.2%	93.2%	93.2%
Rockland County	Males	45 - 49	93.6%	95.1%	94.8%	94.2%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%
Rockland County	Males	50 - 54	82.0%	89.4%	89.1%	88.6%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%
Rockland County	Males	55 - 59	78.2%	87.7%	87.6%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%
Rockland County	Males	60 - 64	66.2%	81.9%	83.5%	86.1%	87.1%	87.1%	87.1%	87.1%	87.1%	87.1%
Rockland County	Males	65+	31.2%	28.9%	30.2%	32.4%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Sullivan County	Females	16 - 19	35.8%	42.7%	39.8%	34.9%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Sullivan County	Females	20 - 24	84.1%	73.4%	72.5%	71.0%	70.4%	70.4%	70.4%	70.4%	70.4%	70.4%
Sullivan County	Females	25 - 29	68.8%	77.1%	76.8%	76.5%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%
Sullivan County	Females	30 - 34	71.7%	75.9%	75.7%	75.3%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%
Sullivan County	Females	35 - 39	80.3%	69.3%	68.9%	68.2%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%
Sullivan County	Females	40 - 44	79.6%	83.9%	83.4%	82.5%	82.2%	82.2%	82.2%	82.2%	82.2%	82.2%
Sullivan County	Females	45 - 49	79.7%	73.2%	73.3%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%
Sullivan County	Females	50 - 54	69.9%	69.3%	69.4%	69.5%	69.5%	69.5%	69.5%	69.5%	69.5%	69.5%
Sullivan County	Females	55 - 59	69.2%	74.0%	76.0%	79.3%	80.6%	80.6%	80.6%	80.6%	80.6%	80.6%
Sullivan County	Females	60 - 64	60.5%	55.6%	57.3%	60.1%	61.3%	61.3%	61.3%	61.3%	61.3%	61.3%
Sullivan County	Females	65+	16.1%	20.4%	22.6%	26.2%	27.6%	27.6%	27.6%	27.6%	27.6%	27.6%
Sullivan County	Males	16 - 19	40.4%	39.5%	37.3%	33.7%	32.3%	32.3%	32.3%	32.3%	32.3%	32.3%
Sullivan County	Males	20 - 24	71.8%	72.0%	70.6%	68.4%	67.5%	67.5%	67.5%	67.5%	67.5%	67.5%
Sullivan County	Males	25 - 29	72.7%	68.1%	67.9%	67.7%	67.6%	67.6%	67.6%	67.6%	67.6%	67.6%

Sullivan County	Males	30 - 34	84.0%	86.8%	86.6%	86.3%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%
Sullivan County	Males	35 - 39	82.1%	68.3%	68.2%	68.1%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%
Sullivan County	Males	40 - 44	84.6%	80.2%	80.2%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Sullivan County	Males	45 - 49	83.5%	88.3%	87.9%	87.4%	87.2%	87.2%	87.2%	87.2%	87.2%	87.2%
Sullivan County	Males	50 - 54	84.6%	75.7%	75.4%	75.0%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%
Sullivan County	Males	55 - 59	81.0%	75.5%	75.4%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Sullivan County	Males	60 - 64	51.8%	59.3%	60.4%	62.3%	63.0%	63.0%	63.0%	63.0%	63.0%	63.0%
Sullivan County	Males	65+	22.8%	27.6%	28.8%	30.9%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%
Ulster County	Females	16 - 19	35.8%	42.7%	39.8%	34.9%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Ulster County	Females	20 - 24	84.1%	73.4%	72.5%	71.0%	70.4%	70.4%	70.4%	70.4%	70.4%	70.4%
Ulster County	Females	25 - 29	68.8%	77.1%	76.8%	76.5%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%
Ulster County	Females	30 - 34	71.7%	75.9%	75.7%	75.3%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%
Ulster County	Females	35 - 39	80.3%	69.3%	68.9%	68.2%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%
Ulster County	Females	40 - 44	79.6%	83.9%	83.4%	82.5%	82.2%	82.2%	82.2%	82.2%	82.2%	82.2%
Ulster County	Females	45 - 49	79.7%	73.2%	73.3%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%
Ulster County	Females	50 - 54	69.9%	69.3%	69.4%	69.5%	69.5%	69.5%	69.5%	69.5%	69.5%	69.5%
Ulster County	Females	55 - 59	69.2%	74.0%	76.0%	79.3%	80.6%	80.6%	80.6%	80.6%	80.6%	80.6%
Ulster County	Females	60 - 64	60.5%	55.6%	57.3%	60.1%	61.3%	61.3%	61.3%	61.3%	61.3%	61.3%
Ulster County	Females	65+	16.1%	20.4%	22.6%	26.2%	27.6%	27.6%	27.6%	27.6%	27.6%	27.6%
Ulster County	Males	16 - 19	40.4%	39.5%	37.3%	33.7%	32.3%	32.3%	32.3%	32.3%	32.3%	32.3%
Ulster County	Males	20 - 24	71.8%	72.0%	70.6%	68.4%	67.5%	67.5%	67.5%	67.5%	67.5%	67.5%
Ulster County	Males	25 - 29	72.7%	68.1%	67.9%	67.7%	67.6%	67.6%	67.6%	67.6%	67.6%	67.6%
Ulster County	Males	30 - 34	84.0%	86.8%	86.6%	86.3%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%
Ulster County	Males	35 - 39	82.1%	68.3%	68.2%	68.1%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%
Ulster County	Males	40 - 44	84.6%	80.2%	80.2%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Ulster County	Males	45 - 49	83.5%	88.3%	87.9%	87.4%	87.2%	87.2%	87.2%	87.2%	87.2%	87.2%
Ulster County	Males	50 - 54	84.6%	75.7%	75.4%	75.0%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%
Ulster County	Males	55 - 59	81.0%	75.5%	75.4%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Ulster County	Males	60 - 64	51.8%	59.3%	60.4%	62.3%	63.0%	63.0%	63.0%	63.0%	63.0%	63.0%
Ulster County	Males	65+	22.8%	27.6%	28.8%	30.9%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%
Westchester County	Females	16 - 19	30.5%	29.6%	27.6%	24.2%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%
Westchester County	Females	20 - 24	66.4%	62.8%	62.0%	60.8%	60.3%	60.3%	60.3%	60.3%	60.3%	60.3%
Westchester County	Females	25 - 29	75.6%	80.4%	80.2%	79.8%	79.7%	79.7%	79.7%	79.7%	79.7%	79.7%
Westchester County	Females	30 - 34	80.7%	75.4%	75.2%	74.9%	74.7%	74.7%	74.7%	74.7%	74.7%	74.7%
Westchester County	Females	35 - 39	74.4%	70.4%	69.9%	69.2%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%
Westchester County	Females	40 - 44	76.8%	78.6%	78.1%	77.3%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%
Westchester County	Females	45 - 49	80.7%	76.5%	76.6%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%
Westchester County	Females	50 - 54	80.9%	79.2%	79.3%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%
Westchester County	Females	55 - 59	74.0%	79.3%	81.5%	85.0%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%
Westchester County	Females	60 - 64	56.2%	60.3%	62.2%	65.3%	66.6%	66.6%	66.6%	66.6%	66.6%	66.6%
Westchester County	Females	65+	17.1%	16.8%	18.5%	21.5%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%
Westchester County	Males	16 - 19	29.2%	28.4%	26.8%	24.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%
Westchester County	Males	20 - 24	74.9%	73.0%	71.6%	69.4%	68.5%	68.5%	68.5%	68.5%	68.5%	68.5%
Westchester County	Males	25 - 29	85.9%	85.6%	85.4%	85.0%	84.9%	84.9%	84.9%	84.9%	84.9%	84.9%
Westchester County	Males	30 - 34	92.2%	95.2%	95.0%	94.6%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%
Westchester County	Males	35 - 39	95.1%	95.0%	94.9%	94.8%	94.7%	94.7%	94.7%	94.7%	94.7%	94.7%
Westchester County	Males	40 - 44	94.0%	90.9%	90.9%	90.7%	90.6%	90.6%	90.6%	90.6%	90.6%	90.6%
Westchester County	Males	45 - 49	93.0%	90.7%	90.4%	89.9%	89.6%	89.6%	89.6%	89.6%	89.6%	89.6%
Westchester County	Males	50 - 54	90.3%	86.6%	86.3%	85.8%	85.6%	85.6%	85.6%	85.6%	85.6%	85.6%
Westchester County	Males	55 - 59	83.7%	86.1%	86.0%	85.9%	85.9%	85.9%	85.9%	85.9%	85.9%	85.9%

Westchester County	Males	60 - 64	71.8%	69.5%	70.8%	72.9%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%
Westchester County	Males	65+	29.5%	30.2%	31.5%	33.8%	34.8%	34.8%	34.8%	34.8%	34.8%	34.8%
New Jersey	Females	16 - 19	33.6%	35.3%	32.9%	28.9%	27.3%	27.3%	27.3%	27.3%	27.3%	27.3%
New Jersey	Females	20 - 24	69.8%	70.8%	69.9%	68.5%	67.9%	67.9%	67.9%	67.9%	67.9%	67.9%
New Jersey	Females	25 - 29	78.6%	81.6%	81.4%	81.0%	80.9%	80.9%	80.9%	80.9%	80.9%	80.9%
New Jersey	Females	30 - 34	76.0%	77.1%	76.9%	76.5%	76.4%	76.4%	76.4%	76.4%	76.4%	76.4%
New Jersey	Females	35 - 39	75.1%	76.3%	75.8%	75.1%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%
New Jersey	Females	40 - 44	75.9%	75.3%	74.9%	74.1%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%
New Jersey	Females	45 - 49	78.4%	78.1%	78.2%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%
New Jersey	Females	50 - 54	78.5%	78.6%	78.7%	78.8%	78.8%	78.8%	78.8%	78.8%	78.8%	78.8%
New Jersey	Females	55 - 59	71.9%	73.4%	75.3%	78.6%	79.9%	79.9%	79.9%	79.9%	79.9%	79.9%
New Jersey	Females	60 - 64	59.1%	58.3%	60.1%	63.1%	64.4%	64.4%	64.4%	64.4%	64.4%	64.4%
New Jersey	Females	65+	15.1%	14.9%	16.5%	19.1%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%
New Jersey	Males	16 - 19	30.7%	31.8%	30.0%	27.1%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
New Jersey	Males	20 - 24	72.1%	69.6%	68.3%	66.1%	65.3%	65.3%	65.3%	65.3%	65.3%	65.3%
New Jersey	Males	25 - 29	88.3%	85.9%	85.7%	85.3%	85.2%	85.2%	85.2%	85.2%	85.2%	85.2%
New Jersey	Males	30 - 34	92.3%	91.8%	91.6%	91.2%	91.1%	91.1%	91.1%	91.1%	91.1%	91.1%
New Jersey	Males	35 - 39	93.2%	92.8%	92.7%	92.6%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%
New Jersey	Males	40 - 44	92.9%	92.5%	92.4%	92.3%	92.2%	92.2%	92.2%	92.2%	92.2%	92.2%
New Jersey	Males	45 - 49	91.2%	91.9%	91.6%	91.1%	90.9%	90.9%	90.9%	90.9%	90.9%	90.9%
New Jersey	Males	50 - 54	87.8%	88.4%	88.1%	87.5%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%
New Jersey	Males	55 - 59	85.5%	83.5%	83.4%	83.3%	83.2%	83.2%	83.2%	83.2%	83.2%	83.2%
New Jersey	Males	60 - 64	68.6%	69.1%	70.4%	72.5%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%
New Jersey	Males	65+	26.0%	26.5%	27.7%	29.7%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%
Bergen County	Females	16 - 19	29.2%	24.2%	22.6%	19.8%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%
Bergen County	Females	20 - 24	66.1%	69.1%	68.2%	66.9%	66.3%	66.3%	66.3%	66.3%	66.3%	66.3%
Bergen County	Females	25 - 29	80.7%	78.9%	78.7%	78.3%	78.1%	78.1%	78.1%	78.1%	78.1%	78.1%
Bergen County	Females	30 - 34	74.8%	74.4%	74.2%	73.8%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%
Bergen County	Females	35 - 39	69.9%	70.0%	69.6%	68.9%	68.6%	68.6%	68.6%	68.6%	68.6%	68.6%
Bergen County	Females	40 - 44	72.1%	73.3%	72.9%	72.2%	71.9%	71.9%	71.9%	71.9%	71.9%	71.9%
Bergen County	Females	45 - 49	77.3%	73.9%	74.0%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%
Bergen County	Females	50 - 54	77.3%	77.5%	77.6%	77.7%	77.7%	77.7%	77.7%	77.7%	77.7%	77.7%
Bergen County	Females	55 - 59	72.0%	72.7%	74.7%	77.9%	79.2%	79.2%	79.2%	79.2%	79.2%	79.2%
Bergen County	Females	60 - 64	65.4%	64.7%	66.7%	70.0%	71.4%	71.4%	71.4%	71.4%	71.4%	71.4%
Bergen County	Females	65+	17.0%	17.3%	19.2%	22.2%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%
Bergen County	Males	16 - 19	28.6%	22.5%	21.3%	19.2%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%
Bergen County	Males	20 - 24	68.2%	69.5%	68.2%	66.1%	65.2%	65.2%	65.2%	65.2%	65.2%	65.2%
Bergen County	Males	25 - 29	87.5%	82.9%	82.7%	82.4%	82.3%	82.3%	82.3%	82.3%	82.3%	82.3%
Bergen County	Males	30 - 34	92.3%	93.5%	93.3%	92.9%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%
Bergen County	Males	35 - 39	97.0%	93.6%	93.5%	93.4%	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%
Bergen County	Males	40 - 44	94.6%	92.5%	92.4%	92.2%	92.2%	92.2%	92.2%	92.2%	92.2%	92.2%
Bergen County	Males	45 - 49	93.7%	94.1%	93.8%	93.3%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%
Bergen County	Males	50 - 54	89.6%	93.6%	93.2%	92.7%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%
Bergen County	Males	55 - 59	87.7%	88.1%	88.0%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%
Bergen County	Males	60 - 64	73.6%	74.4%	75.8%	78.2%	79.1%	79.1%	79.1%	79.1%	79.1%	79.1%
Bergen County	Males	65+	29.4%	30.6%	32.0%	34.3%	35.2%	35.2%	35.2%	35.2%	35.2%	35.2%
Essex County	Females	16 - 19	28.7%	31.3%	29.2%	25.6%	24.2%	24.2%	24.2%	24.2%	24.2%	24.2%
Essex County	Females	20 - 24	65.1%	70.1%	69.2%	67.8%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%
Essex County	Females	25 - 29	77.1%	86.7%	86.5%	86.1%	85.9%	85.9%	85.9%	85.9%	85.9%	85.9%
Essex County	Females	30 - 34	81.2%	82.2%	82.0%	81.6%	81.5%	81.5%	81.5%	81.5%	81.5%	81.5%

Essex County	Females	35 - 39	79.1%	80.8%	80.3%	79.5%	79.2%	79.2%	79.2%	79.2%	79.2%	79.2%
Essex County	Females	40 - 44	79.7%	72.4%	71.9%	71.2%	70.9%	70.9%	70.9%	70.9%	70.9%	70.9%
Essex County	Females	45 - 49	80.3%	80.0%	80.0%	80.1%	80.2%	80.2%	80.2%	80.2%	80.2%	80.2%
Essex County	Females	50 - 54	74.5%	81.7%	81.8%	81.9%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%
Essex County	Females	55 - 59	70.8%	72.8%	74.8%	78.0%	79.3%	79.3%	79.3%	79.3%	79.3%	79.3%
Essex County	Females	60 - 64	60.9%	54.0%	55.6%	58.4%	59.5%	59.5%	59.5%	59.5%	59.5%	59.5%
Essex County	Females	65+	16.1%	14.4%	16.0%	18.5%	19.5%	19.5%	19.5%	19.5%	19.5%	19.5%
Essex County	Males	16 - 19	20.4%	28.0%	26.5%	23.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
Essex County	Males	20 - 24	70.6%	68.3%	67.1%	65.0%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%
Essex County	Males	25 - 29	84.1%	81.3%	81.1%	80.8%	80.6%	80.6%	80.6%	80.6%	80.6%	80.6%
Essex County	Males	30 - 34	88.2%	80.8%	80.6%	80.3%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%
Essex County	Males	35 - 39	89.0%	90.8%	90.7%	90.6%	90.5%	90.5%	90.5%	90.5%	90.5%	90.5%
Essex County	Males	40 - 44	87.1%	88.0%	87.9%	87.7%	87.7%	87.7%	87.7%	87.7%	87.7%	87.7%
Essex County	Males	45 - 49	90.1%	89.3%	89.0%	88.5%	88.3%	88.3%	88.3%	88.3%	88.3%	88.3%
Essex County	Males	50 - 54	77.2%	82.2%	81.9%	81.4%	81.2%	81.2%	81.2%	81.2%	81.2%	81.2%
Essex County	Males	55 - 59	76.3%	83.2%	83.1%	83.0%	83.0%	83.0%	83.0%	83.0%	83.0%	83.0%
Essex County	Males	60 - 64	61.7%	64.6%	65.8%	67.9%	68.7%	68.7%	68.7%	68.7%	68.7%	68.7%
Essex County	Males	65+	23.7%	29.2%	30.6%	32.8%	33.7%	33.7%	33.7%	33.7%	33.7%	33.7%
Hudson County	Females	16 - 19	28.2%	24.9%	23.2%	20.4%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%
Hudson County	Females	20 - 24	72.7%	66.6%	65.8%	64.5%	63.9%	63.9%	63.9%	63.9%	63.9%	63.9%
Hudson County	Females	25 - 29	79.2%	79.0%	78.8%	78.4%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%
Hudson County	Females	30 - 34	73.8%	76.5%	76.3%	75.9%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Hudson County	Females	35 - 39	81.0%	78.8%	78.3%	77.5%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%
Hudson County	Females	40 - 44	77.3%	76.6%	76.2%	75.4%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%
Hudson County	Females	45 - 49	78.9%	75.8%	75.9%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Hudson County	Females	50 - 54	73.2%	75.1%	75.1%	75.2%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Hudson County	Females	55 - 59	65.9%	69.9%	71.8%	74.9%	76.2%	76.2%	76.2%	76.2%	76.2%	76.2%
Hudson County	Females	60 - 64	49.6%	53.5%	55.2%	57.9%	59.0%	59.0%	59.0%	59.0%	59.0%	59.0%
Hudson County	Females	65+	15.1%	13.1%	14.5%	16.9%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%
Hudson County	Males	16 - 19	27.2%	19.5%	18.5%	16.7%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
Hudson County	Males	20 - 24	74.7%	69.8%	68.5%	66.4%	65.5%	65.5%	65.5%	65.5%	65.5%	65.5%
Hudson County	Males	25 - 29	89.7%	85.3%	85.1%	84.8%	84.6%	84.6%	84.6%	84.6%	84.6%	84.6%
Hudson County	Males	30 - 34	91.8%	94.0%	93.8%	93.4%	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%
Hudson County	Males	35 - 39	95.8%	96.2%	96.1%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%
Hudson County	Males	40 - 44	94.1%	91.1%	91.0%	90.9%	90.8%	90.8%	90.8%	90.8%	90.8%	90.8%
Hudson County	Males	45 - 49	86.9%	92.4%	92.1%	91.5%	91.3%	91.3%	91.3%	91.3%	91.3%	91.3%
Hudson County	Males	50 - 54	85.9%	87.9%	87.6%	87.1%	86.9%	86.9%	86.9%	86.9%	86.9%	86.9%
Hudson County	Males	55 - 59	86.7%	77.9%	77.9%	77.8%	77.7%	77.7%	77.7%	77.7%	77.7%	77.7%
Hudson County	Males	60 - 64	75.0%	67.1%	68.4%	70.5%	71.3%	71.3%	71.3%	71.3%	71.3%	71.3%
Hudson County	Males	65+	21.1%	18.2%	19.1%	20.5%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Hunterdon County	Females	16 - 19	57.2%	60.9%	56.7%	49.8%	47.0%	47.0%	47.0%	47.0%	47.0%	47.0%
Hunterdon County	Females	20 - 24	75.4%	88.2%	87.1%	85.4%	84.7%	84.7%	84.7%	84.7%	84.7%	84.7%
Hunterdon County	Females	25 - 29	87.8%	83.5%	83.2%	82.8%	82.7%	82.7%	82.7%	82.7%	82.7%	82.7%
Hunterdon County	Females	30 - 34	77.4%	89.1%	88.9%	88.5%	88.3%	88.3%	88.3%	88.3%	88.3%	88.3%
Hunterdon County	Females	35 - 39	80.7%	81.5%	81.0%	80.2%	79.8%	79.8%	79.8%	79.8%	79.8%	79.8%
Hunterdon County	Females	40 - 44	79.6%	82.1%	81.6%	80.8%	80.5%	80.5%	80.5%	80.5%	80.5%	80.5%
Hunterdon County	Females	45 - 49	75.1%	86.1%	86.2%	86.3%	86.3%	86.3%	86.3%	86.3%	86.3%	86.3%
Hunterdon County	Females	50 - 54	79.2%	78.7%	78.8%	78.9%	79.0%	79.0%	79.0%	79.0%	79.0%	79.0%
Hunterdon County	Females	55 - 59	84.7%	84.6%	86.9%	90.7%	92.2%	92.2%	92.2%	92.2%	92.2%	92.2%
Hunterdon County	Females	60 - 64	66.9%	77.5%	79.9%	83.9%	85.5%	85.5%	85.5%	85.5%	85.5%	85.5%

Hunterdon County	Females	65+	10.1%	18.3%	20.2%	23.5%	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%
Hunterdon County	Males	16 - 19	40.9%	30.8%	29.1%	26.3%	25.2%	25.2%	25.2%	25.2%	25.2%	25.2%
Hunterdon County	Males	20 - 24	46.0%	44.6%	43.7%	42.4%	41.8%	41.8%	41.8%	41.8%	41.8%	41.8%
Hunterdon County	Males	25 - 29	75.6%	97.5%	97.3%	96.9%	96.8%	96.8%	96.8%	96.8%	96.8%	96.8%
Hunterdon County	Males	30 - 34	92.0%	98.7%	98.5%	98.1%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
Hunterdon County	Males	35 - 39	100.0%	92.6%	92.5%	92.4%	92.3%	92.3%	92.3%	92.3%	92.3%	92.3%
Hunterdon County	Males	40 - 44	94.1%	97.7%	97.6%	97.5%	97.4%	97.4%	97.4%	97.4%	97.4%	97.4%
Hunterdon County	Males	45 - 49	90.5%	90.3%	90.0%	89.5%	89.3%	89.3%	89.3%	89.3%	89.3%	89.3%
Hunterdon County	Males	50 - 54	89.6%	95.7%	95.4%	94.8%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%
Hunterdon County	Males	55 - 59	87.0%	94.8%	94.8%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%
Hunterdon County	Males	60 - 64	69.4%	82.7%	84.3%	86.8%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%
Hunterdon County	Males	65+	29.9%	38.6%	40.4%	43.3%	44.5%	44.5%	44.5%	44.5%	44.5%	44.5%
Mercer County	Females	16 - 19	31.4%	48.3%	45.0%	39.5%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%
Mercer County	Females	20 - 24	73.7%	74.5%	73.6%	72.1%	71.5%	71.5%	71.5%	71.5%	71.5%	71.5%
Mercer County	Females	25 - 29	76.3%	84.5%	84.3%	83.9%	83.7%	83.7%	83.7%	83.7%	83.7%	83.7%
Mercer County	Females	30 - 34	70.2%	85.8%	85.6%	85.2%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Mercer County	Females	35 - 39	69.7%	80.4%	79.9%	79.1%	78.8%	78.8%	78.8%	78.8%	78.8%	78.8%
Mercer County	Females	40 - 44	78.3%	67.8%	67.4%	66.7%	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%
Mercer County	Females	45 - 49	81.2%	80.3%	80.4%	80.5%	80.5%	80.5%	80.5%	80.5%	80.5%	80.5%
Mercer County	Females	50 - 54	84.3%	79.5%	79.5%	79.7%	79.7%	79.7%	79.7%	79.7%	79.7%	79.7%
Mercer County	Females	55 - 59	71.3%	71.8%	73.7%	76.9%	78.2%	78.2%	78.2%	78.2%	78.2%	78.2%
Mercer County	Females	60 - 64	59.4%	56.9%	58.7%	61.6%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%
Mercer County	Females	65+	18.2%	13.7%	15.2%	17.6%	18.6%	18.6%	18.6%	18.6%	18.6%	18.6%
Mercer County	Males	16 - 19	29.2%	28.3%	26.8%	24.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%
Mercer County	Males	20 - 24	66.2%	70.9%	69.6%	67.4%	66.5%	66.5%	66.5%	66.5%	66.5%	66.5%
Mercer County	Males	25 - 29	87.4%	82.9%	82.7%	82.4%	82.3%	82.3%	82.3%	82.3%	82.3%	82.3%
Mercer County	Males	30 - 34	90.3%	93.4%	93.2%	92.8%	92.7%	92.7%	92.7%	92.7%	92.7%	92.7%
Mercer County	Males	35 - 39	90.5%	90.3%	90.2%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Mercer County	Males	40 - 44	87.7%	89.1%	89.0%	88.9%	88.8%	88.8%	88.8%	88.8%	88.8%	88.8%
Mercer County	Males	45 - 49	89.3%	85.5%	85.2%	84.7%	84.5%	84.5%	84.5%	84.5%	84.5%	84.5%
Mercer County	Males	50 - 54	88.1%	84.5%	84.2%	83.8%	83.6%	83.6%	83.6%	83.6%	83.6%	83.6%
Mercer County	Males	55 - 59	86.4%	78.0%	77.9%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%
Mercer County	Males	60 - 64	66.9%	51.3%	52.3%	53.9%	54.5%	54.5%	54.5%	54.5%	54.5%	54.5%
Mercer County	Males	65+	30.4%	22.9%	24.0%	25.7%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Middlesex County	Females	16 - 19	34.3%	28.9%	26.9%	23.6%	22.3%	22.3%	22.3%	22.3%	22.3%	22.3%
Middlesex County	Females	20 - 24	65.9%	70.0%	69.2%	67.8%	67.2%	67.2%	67.2%	67.2%	67.2%	67.2%
Middlesex County	Females	25 - 29	76.1%	79.7%	79.4%	79.1%	78.9%	78.9%	78.9%	78.9%	78.9%	78.9%
Middlesex County	Females	30 - 34	70.9%	66.0%	65.8%	65.5%	65.4%	65.4%	65.4%	65.4%	65.4%	65.4%
Middlesex County	Females	35 - 39	72.5%	72.7%	72.3%	71.5%	71.3%	71.3%	71.3%	71.3%	71.3%	71.3%
Middlesex County	Females	40 - 44	70.2%	76.0%	75.5%	74.8%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%
Middlesex County	Females	45 - 49	81.3%	77.7%	77.8%	77.9%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%
Middlesex County	Females	50 - 54	82.5%	82.3%	82.4%	82.5%	82.5%	82.5%	82.5%	82.5%	82.5%	82.5%
Middlesex County	Females	55 - 59	74.7%	69.5%	71.4%	74.5%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Middlesex County	Females	60 - 64	54.5%	56.7%	58.5%	61.4%	62.6%	62.6%	62.6%	62.6%	62.6%	62.6%
Middlesex County	Females	65+	16.8%	12.5%	13.8%	16.0%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%
Middlesex County	Males	16 - 19	30.4%	33.3%	31.5%	28.5%	27.3%	27.3%	27.3%	27.3%	27.3%	27.3%
Middlesex County	Males	20 - 24	71.8%	64.9%	63.7%	61.7%	60.9%	60.9%	60.9%	60.9%	60.9%	60.9%
Middlesex County	Males	25 - 29	91.9%	86.6%	86.4%	86.1%	86.0%	86.0%	86.0%	86.0%	86.0%	86.0%
Middlesex County	Males	30 - 34	94.6%	89.0%	88.8%	88.5%	88.3%	88.3%	88.3%	88.3%	88.3%	88.3%
Middlesex County	Males	35 - 39	91.7%	90.7%	90.6%	90.4%	90.4%	90.4%	90.4%	90.4%	90.4%	90.4%

Middlesex County	Males	40 - 44	94.1%	92.6%	92.5%	92.4%	92.3%	92.3%	92.3%	92.3%	92.3%	92.3%
Middlesex County	Males	45 - 49	90.8%	90.6%	90.3%	89.8%	89.6%	89.6%	89.6%	89.6%	89.6%	89.6%
Middlesex County	Males	50 - 54	87.6%	86.5%	86.2%	85.7%	85.5%	85.5%	85.5%	85.5%	85.5%	85.5%
Middlesex County	Males	55 - 59	84.1%	82.6%	82.5%	82.4%	82.3%	82.3%	82.3%	82.3%	82.3%	82.3%
Middlesex County	Males	60 - 64	74.9%	75.0%	76.4%	78.8%	79.7%	79.7%	79.7%	79.7%	79.7%	79.7%
Middlesex County	Males	65+	22.5%	24.5%	25.6%	27.5%	28.3%	28.3%	28.3%	28.3%	28.3%	28.3%
Monmouth County	Females	16 - 19	32.8%	36.1%	33.6%	29.5%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%
Monmouth County	Females	20 - 24	70.6%	75.5%	74.6%	73.1%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%
Monmouth County	Females	25 - 29	80.2%	77.2%	77.0%	76.6%	76.5%	76.5%	76.5%	76.5%	76.5%	76.5%
Monmouth County	Females	30 - 34	77.4%	81.6%	81.4%	81.0%	80.8%	80.8%	80.8%	80.8%	80.8%	80.8%
Monmouth County	Females	35 - 39	62.0%	78.2%	77.8%	77.0%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%
Monmouth County	Females	40 - 44	69.9%	75.5%	75.1%	74.3%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%
Monmouth County	Females	45 - 49	78.7%	74.3%	74.3%	74.4%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%
Monmouth County	Females	50 - 54	76.5%	79.8%	79.9%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Monmouth County	Females	55 - 59	73.0%	71.1%	73.0%	76.2%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%
Monmouth County	Females	60 - 64	57.8%	59.5%	61.3%	64.4%	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%
Monmouth County	Females	65+	12.6%	16.6%	18.3%	21.3%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
Monmouth County	Males	16 - 19	42.7%	36.5%	34.5%	31.1%	29.8%	29.8%	29.8%	29.8%	29.8%	29.8%
Monmouth County	Males	20 - 24	79.1%	69.1%	67.8%	65.7%	64.8%	64.8%	64.8%	64.8%	64.8%	64.8%
Monmouth County	Males	25 - 29	91.9%	91.5%	91.3%	90.9%	90.8%	90.8%	90.8%	90.8%	90.8%	90.8%
Monmouth County	Males	30 - 34	95.5%	95.5%	95.3%	94.9%	94.8%	94.8%	94.8%	94.8%	94.8%	94.8%
Monmouth County	Males	35 - 39	95.9%	91.9%	91.8%	91.7%	91.6%	91.6%	91.6%	91.6%	91.6%	91.6%
Monmouth County	Males	40 - 44	95.0%	94.5%	94.4%	94.2%	94.2%	94.2%	94.2%	94.2%	94.2%	94.2%
Monmouth County	Males	45 - 49	92.0%	94.0%	93.7%	93.2%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%
Monmouth County	Males	50 - 54	91.1%	87.3%	87.0%	86.5%	86.3%	86.3%	86.3%	86.3%	86.3%	86.3%
Monmouth County	Males	55 - 59	89.2%	86.4%	86.4%	86.3%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%
Monmouth County	Males	60 - 64	70.1%	70.1%	71.4%	73.6%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%
Monmouth County	Males	65+	27.1%	28.2%	29.4%	31.6%	32.4%	32.4%	32.4%	32.4%	32.4%	32.4%
Morris County	Females	16 - 19	33.0%	43.2%	40.2%	35.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Morris County	Females	20 - 24	69.9%	77.1%	76.2%	74.6%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%
Morris County	Females	25 - 29	85.0%	85.1%	84.9%	84.5%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%
Morris County	Females	30 - 34	81.2%	79.1%	78.8%	78.5%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%
Morris County	Females	35 - 39	75.1%	79.0%	78.6%	77.8%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%
Morris County	Females	40 - 44	76.8%	73.9%	73.4%	72.7%	72.4%	72.4%	72.4%	72.4%	72.4%	72.4%
Morris County	Females	45 - 49	73.2%	81.7%	81.8%	81.9%	81.9%	81.9%	81.9%	81.9%	81.9%	81.9%
Morris County	Females	50 - 54	76.5%	74.9%	75.0%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%
Morris County	Females	55 - 59	75.8%	75.5%	77.5%	80.9%	82.2%	82.2%	82.2%	82.2%	82.2%	82.2%
Morris County	Females	60 - 64	65.3%	64.6%	66.6%	70.0%	71.3%	71.3%	71.3%	71.3%	71.3%	71.3%
Morris County	Females	65+	22.1%	20.0%	22.1%	25.7%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%
Morris County	Males	16 - 19	28.4%	38.1%	36.1%	32.6%	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%
Morris County	Males	20 - 24	79.1%	71.8%	70.4%	68.2%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%
Morris County	Males	25 - 29	88.6%	86.3%	86.1%	85.8%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%
Morris County	Males	30 - 34	92.1%	97.2%	96.9%	96.5%	96.4%	96.4%	96.4%	96.4%	96.4%	96.4%
Morris County	Males	35 - 39	94.5%	94.8%	94.7%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%
Morris County	Males	40 - 44	92.3%	97.5%	97.4%	97.3%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%
Morris County	Males	45 - 49	91.6%	95.7%	95.3%	94.8%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%
Morris County	Males	50 - 54	92.1%	92.8%	92.5%	91.9%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%
Morris County	Males	55 - 59	88.5%	93.4%	93.3%	93.2%	93.2%	93.2%	93.2%	93.2%	93.2%	93.2%
Morris County	Males	60 - 64	74.1%	71.5%	72.9%	75.1%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Morris County	Males	65+	32.8%	29.5%	30.8%	33.1%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%

Ocean County	Females	16 - 19	44.3%	42.4%	39.5%	34.7%	32.7%	32.7%	32.7%	32.7%	32.7%	32.7%
Ocean County	Females	20 - 24	79.9%	77.9%	77.0%	75.5%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%
Ocean County	Females	25 - 29	78.8%	86.0%	85.8%	85.4%	85.2%	85.2%	85.2%	85.2%	85.2%	85.2%
Ocean County	Females	30 - 34	75.7%	71.8%	71.6%	71.3%	71.1%	71.1%	71.1%	71.1%	71.1%	71.1%
Ocean County	Females	35 - 39	78.2%	78.9%	78.5%	77.7%	77.3%	77.3%	77.3%	77.3%	77.3%	77.3%
Ocean County	Females	40 - 44	82.5%	76.3%	75.8%	75.0%	74.7%	74.7%	74.7%	74.7%	74.7%	74.7%
Ocean County	Females	45 - 49	74.3%	76.2%	76.2%	76.3%	76.4%	76.4%	76.4%	76.4%	76.4%	76.4%
Ocean County	Females	50 - 54	81.2%	77.5%	77.5%	77.7%	77.7%	77.7%	77.7%	77.7%	77.7%	77.7%
Ocean County	Females	55 - 59	69.2%	73.7%	75.7%	78.9%	80.3%	80.3%	80.3%	80.3%	80.3%	80.3%
Ocean County	Females	60 - 64	52.4%	54.9%	56.6%	59.4%	60.5%	60.5%	60.5%	60.5%	60.5%	60.5%
Ocean County	Females	65+	11.7%	9.8%	10.8%	12.6%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Ocean County	Males	16 - 19	40.7%	40.2%	38.0%	34.4%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%
Ocean County	Males	20 - 24	70.1%	67.8%	66.6%	64.5%	63.7%	63.7%	63.7%	63.7%	63.7%	63.7%
Ocean County	Males	25 - 29	73.3%	81.0%	80.8%	80.5%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%
Ocean County	Males	30 - 34	90.0%	89.7%	89.5%	89.1%	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%
Ocean County	Males	35 - 39	94.0%	93.6%	93.5%	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%
Ocean County	Males	40 - 44	95.0%	94.9%	94.8%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%
Ocean County	Males	45 - 49	94.0%	95.2%	94.9%	94.4%	94.1%	94.1%	94.1%	94.1%	94.1%	94.1%
Ocean County	Males	50 - 54	90.8%	85.0%	84.7%	84.2%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%
Ocean County	Males	55 - 59	82.3%	75.5%	75.4%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Ocean County	Males	60 - 64	57.3%	58.7%	59.8%	61.7%	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%
Ocean County	Males	65+	18.6%	19.8%	20.7%	22.2%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%
Passaic County	Females	16 - 19	33.6%	35.0%	32.6%	28.6%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Passaic County	Females	20 - 24	63.1%	66.4%	65.6%	64.3%	63.8%	63.8%	63.8%	63.8%	63.8%	63.8%
Passaic County	Females	25 - 29	71.1%	74.4%	74.2%	73.8%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%
Passaic County	Females	30 - 34	70.2%	73.7%	73.5%	73.1%	73.0%	73.0%	73.0%	73.0%	73.0%	73.0%
Passaic County	Females	35 - 39	77.5%	71.2%	70.8%	70.0%	69.8%	69.8%	69.8%	69.8%	69.8%	69.8%
Passaic County	Females	40 - 44	76.9%	74.8%	74.3%	73.6%	73.3%	73.3%	73.3%	73.3%	73.3%	73.3%
Passaic County	Females	45 - 49	73.1%	78.7%	78.7%	78.8%	78.9%	78.9%	78.9%	78.9%	78.9%	78.9%
Passaic County	Females	50 - 54	80.2%	72.0%	72.1%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%	72.2%
Passaic County	Females	55 - 59	66.0%	68.7%	70.5%	73.6%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%
Passaic County	Females	60 - 64	56.7%	61.0%	62.9%	66.0%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%
Passaic County	Females	65+	11.0%	15.8%	17.5%	20.2%	21.4%	21.4%	21.4%	21.4%	21.4%	21.4%
Passaic County	Males	16 - 19	24.2%	33.9%	32.0%	28.9%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%
Passaic County	Males	20 - 24	68.0%	70.9%	69.6%	67.4%	66.5%	66.5%	66.5%	66.5%	66.5%	66.5%
Passaic County	Males	25 - 29	87.3%	85.8%	85.6%	85.3%	85.1%	85.1%	85.1%	85.1%	85.1%	85.1%
Passaic County	Males	30 - 34	89.7%	95.8%	95.5%	95.2%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Passaic County	Males	35 - 39	88.2%	86.4%	86.3%	86.1%	86.1%	86.1%	86.1%	86.1%	86.1%	86.1%
Passaic County	Males	40 - 44	91.3%	88.1%	88.1%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%
Passaic County	Males	45 - 49	87.7%	87.7%	87.4%	86.9%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%
Passaic County	Males	50 - 54	83.8%	85.2%	84.9%	84.4%	84.2%	84.2%	84.2%	84.2%	84.2%	84.2%
Passaic County	Males	55 - 59	88.4%	77.7%	77.6%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%
Passaic County	Males	60 - 64	66.8%	68.7%	70.0%	72.2%	73.1%	73.1%	73.1%	73.1%	73.1%	73.1%
Passaic County	Males	65+	22.9%	24.1%	25.2%	27.1%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%
Somerset County	Females	16 - 19	41.5%	29.9%	27.9%	24.5%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%
Somerset County	Females	20 - 24	64.4%	67.3%	66.5%	65.1%	64.6%	64.6%	64.6%	64.6%	64.6%	64.6%
Somerset County	Females	25 - 29	76.2%	85.3%	85.1%	84.7%	84.5%	84.5%	84.5%	84.5%	84.5%	84.5%
Somerset County	Females	30 - 34	82.6%	76.3%	76.1%	75.8%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%
Somerset County	Females	35 - 39	79.9%	71.9%	71.5%	70.8%	70.5%	70.5%	70.5%	70.5%	70.5%	70.5%
Somerset County	Females	40 - 44	83.1%	86.2%	85.6%	84.8%	84.4%	84.4%	84.4%	84.4%	84.4%	84.4%

Somerset County	Females	45 - 49	89.7%	79.0%	79.1%	79.2%	79.2%	79.2%	79.2%	79.2%	79.2%	79.2%
Somerset County	Females	50 - 54	75.8%	83.6%	83.7%	83.8%	83.8%	83.8%	83.8%	83.8%	83.8%	83.8%
Somerset County	Females	55 - 59	81.3%	87.6%	90.0%	93.9%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%
Somerset County	Females	60 - 64	64.9%	56.6%	58.3%	61.2%	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%
Somerset County	Females	65+	14.9%	12.8%	14.1%	16.4%	17.3%	17.3%	17.3%	17.3%	17.3%	17.3%
Somerset County	Males	16 - 19	31.5%	43.7%	41.3%	37.4%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%
Somerset County	Males	20 - 24	73.3%	73.2%	71.8%	69.5%	68.6%	68.6%	68.6%	68.6%	68.6%	68.6%
Somerset County	Males	25 - 29	95.5%	95.9%	95.6%	95.3%	95.1%	95.1%	95.1%	95.1%	95.1%	95.1%
Somerset County	Males	30 - 34	95.4%	96.5%	96.3%	95.9%	95.7%	95.7%	95.7%	95.7%	95.7%	95.7%
Somerset County	Males	35 - 39	93.2%	98.2%	98.1%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%
Somerset County	Males	40 - 44	93.3%	95.7%	95.7%	95.5%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%
Somerset County	Males	45 - 49	96.0%	96.6%	96.3%	95.7%	95.5%	95.5%	95.5%	95.5%	95.5%	95.5%
Somerset County	Males	50 - 54	89.3%	90.1%	89.8%	89.3%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%
Somerset County	Males	55 - 59	88.3%	78.4%	78.4%	78.3%	78.2%	78.2%	78.2%	78.2%	78.2%	78.2%
Somerset County	Males	60 - 64	78.6%	75.9%	77.3%	79.7%	80.6%	80.6%	80.6%	80.6%	80.6%	80.6%
Somerset County	Males	65+	28.9%	27.8%	29.1%	31.2%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%
Sussex County	Females	16 - 19	37.9%	48.2%	44.9%	39.4%	37.2%	37.2%	37.2%	37.2%	37.2%	37.2%
Sussex County	Females	20 - 24	74.4%	78.5%	77.5%	76.0%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Sussex County	Females	25 - 29	80.4%	82.9%	82.7%	82.3%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%
Sussex County	Females	30 - 34	81.3%	80.9%	80.7%	80.3%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%
Sussex County	Females	35 - 39	79.8%	76.8%	76.4%	75.6%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
Sussex County	Females	40 - 44	76.0%	82.4%	81.9%	81.1%	80.8%	80.8%	80.8%	80.8%	80.8%	80.8%
Sussex County	Females	45 - 49	75.3%	83.4%	83.5%	83.6%	83.6%	83.6%	83.6%	83.6%	83.6%	83.6%
Sussex County	Females	50 - 54	83.7%	75.4%	75.4%	75.5%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%
Sussex County	Females	55 - 59	73.3%	80.2%	82.4%	85.9%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%
Sussex County	Females	60 - 64	71.4%	59.2%	61.1%	64.1%	65.4%	65.4%	65.4%	65.4%	65.4%	65.4%
Sussex County	Females	65+	19.6%	18.3%	20.2%	23.5%	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%
Sussex County	Males	16 - 19	33.1%	48.8%	46.1%	41.7%	39.9%	39.9%	39.9%	39.9%	39.9%	39.9%
Sussex County	Males	20 - 24	80.7%	88.0%	86.3%	83.6%	82.5%	82.5%	82.5%	82.5%	82.5%	82.5%
Sussex County	Males	25 - 29	88.4%	94.1%	93.9%	93.5%	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%
Sussex County	Males	30 - 34	94.5%	97.4%	97.1%	96.8%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%
Sussex County	Males	35 - 39	93.9%	94.9%	94.8%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%
Sussex County	Males	40 - 44	98.1%	96.5%	96.4%	96.2%	96.1%	96.1%	96.1%	96.1%	96.1%	96.1%
Sussex County	Males	45 - 49	89.8%	89.9%	89.5%	89.0%	88.8%	88.8%	88.8%	88.8%	88.8%	88.8%
Sussex County	Males	50 - 54	85.6%	97.3%	96.9%	96.4%	96.1%	96.1%	96.1%	96.1%	96.1%	96.1%
Sussex County	Males	55 - 59	85.2%	80.2%	80.1%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Sussex County	Males	60 - 64	63.7%	69.4%	70.8%	72.9%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%
Sussex County	Males	65+	30.8%	25.9%	27.0%	29.0%	29.8%	29.8%	29.8%	29.8%	29.8%	29.8%
Union County	Females	16 - 19	34.5%	45.7%	42.6%	37.4%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%
Union County	Females	20 - 24	78.5%	66.3%	65.5%	64.2%	63.6%	63.6%	63.6%	63.6%	63.6%	63.6%
Union County	Females	25 - 29	82.9%	89.0%	88.8%	88.4%	88.2%	88.2%	88.2%	88.2%	88.2%	88.2%
Union County	Females	30 - 34	82.7%	85.6%	85.4%	85.0%	84.8%	84.8%	84.8%	84.8%	84.8%	84.8%
Union County	Females	35 - 39	77.2%	81.4%	80.9%	80.1%	79.8%	79.8%	79.8%	79.8%	79.8%	79.8%
Union County	Females	40 - 44	76.2%	78.7%	78.2%	77.4%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%
Union County	Females	45 - 49	79.0%	80.7%	80.7%	80.8%	80.9%	80.9%	80.9%	80.9%	80.9%	80.9%
Union County	Females	50 - 54	81.0%	82.8%	82.9%	83.0%	83.0%	83.0%	83.0%	83.0%	83.0%	83.0%
Union County	Females	55 - 59	70.9%	72.3%	74.2%	77.5%	78.8%	78.8%	78.8%	78.8%	78.8%	78.8%
Union County	Females	60 - 64	56.3%	52.0%	53.6%	56.2%	57.3%	57.3%	57.3%	57.3%	57.3%	57.3%
Union County	Females	65+	13.6%	16.9%	18.7%	21.7%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
Union County	Males	16 - 19	32.9%	33.8%	32.0%	28.9%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%

Union County	Males	20 - 24	82.0%	74.6%	73.2%	70.9%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Union County	Males	25 - 29	95.7%	88.3%	88.1%	87.7%	87.6%	87.6%	87.6%	87.6%	87.6%	87.6%
Union County	Males	30 - 34	95.4%	90.0%	89.7%	89.4%	89.2%	89.2%	89.2%	89.2%	89.2%	89.2%
Union County	Males	35 - 39	92.2%	93.4%	93.3%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%
Union County	Males	40 - 44	93.5%	93.6%	93.5%	93.4%	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%
Union County	Males	45 - 49	90.4%	88.5%	88.1%	87.6%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%
Union County	Males	50 - 54	88.3%	88.6%	88.3%	87.8%	87.6%	87.6%	87.6%	87.6%	87.6%	87.6%
Union County	Males	55 - 59	84.2%	85.5%	85.4%	85.3%	85.3%	85.3%	85.3%	85.3%	85.3%	85.3%
Union County	Males	60 - 64	66.1%	72.9%	74.3%	76.6%	77.5%	77.5%	77.5%	77.5%	77.5%	77.5%
Union County	Males	65+	30.5%	31.7%	33.2%	35.6%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%
Warren County	Females	16 - 19	46.6%	43.9%	40.9%	35.9%	33.9%	33.9%	33.9%	33.9%	33.9%	33.9%
Warren County	Females	20 - 24	83.7%	62.5%	61.8%	60.5%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Warren County	Females	25 - 29	73.8%	74.2%	74.0%	73.6%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%
Warren County	Females	30 - 34	66.8%	84.4%	84.1%	83.7%	83.6%	83.6%	83.6%	83.6%	83.6%	83.6%
Warren County	Females	35 - 39	85.7%	73.6%	73.1%	72.4%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%
Warren County	Females	40 - 44	72.9%	72.3%	71.9%	71.1%	70.9%	70.9%	70.9%	70.9%	70.9%	70.9%
Warren County	Females	45 - 49	74.6%	86.7%	86.8%	86.9%	86.9%	86.9%	86.9%	86.9%	86.9%	86.9%
Warren County	Females	50 - 54	83.2%	69.3%	69.4%	69.4%	69.5%	69.5%	69.5%	69.5%	69.5%	69.5%
Warren County	Females	55 - 59	60.0%	79.8%	81.9%	85.4%	86.9%	86.9%	86.9%	86.9%	86.9%	86.9%
Warren County	Females	60 - 64	71.6%	56.6%	58.4%	61.3%	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Warren County	Females	65+	9.0%	16.3%	18.0%	20.9%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Warren County	Males	16 - 19	52.6%	20.1%	19.0%	17.2%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%
Warren County	Males	20 - 24	61.0%	88.0%	86.4%	83.6%	82.6%	82.6%	82.6%	82.6%	82.6%	82.6%
Warren County	Males	25 - 29	100.0%	92.5%	92.3%	91.9%	91.8%	91.8%	91.8%	91.8%	91.8%	91.8%
Warren County	Males	30 - 34	100.0%	95.0%	94.8%	94.4%	94.3%	94.3%	94.3%	94.3%	94.3%	94.3%
Warren County	Males	35 - 39	98.4%	98.4%	98.3%	98.1%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
Warren County	Males	40 - 44	97.2%	96.7%	96.6%	96.4%	96.3%	96.3%	96.3%	96.3%	96.3%	96.3%
Warren County	Males	45 - 49	97.6%	98.3%	98.0%	97.4%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%
Warren County	Males	50 - 54	99.5%	90.0%	89.7%	89.2%	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%
Warren County	Males	55 - 59	83.7%	78.5%	78.4%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%	78.3%
Warren County	Males	60 - 64	46.7%	74.9%	76.3%	78.7%	79.6%	79.6%	79.6%	79.6%	79.6%	79.6%
Warren County	Males	65+	32.1%	31.6%	33.0%	35.4%	36.4%	36.4%	36.4%	36.4%	36.4%	36.4%
Connecticut	Females	16 - 19	39.0%	44.4%	41.4%	36.3%	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%
Connecticut	Females	20 - 24	77.6%	75.0%	74.1%	72.6%	72.0%	72.0%	72.0%	72.0%	72.0%	72.0%
Connecticut	Females	25 - 29	80.0%	81.2%	80.9%	80.5%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%
Connecticut	Females	30 - 34	78.1%	80.3%	80.1%	79.7%	79.6%	79.6%	79.6%	79.6%	79.6%	79.6%
Connecticut	Females	35 - 39	79.5%	79.7%	79.2%	78.4%	78.1%	78.1%	78.1%	78.1%	78.1%	78.1%
Connecticut	Females	40 - 44	76.5%	75.9%	75.5%	74.7%	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%
Connecticut	Females	45 - 49	81.5%	81.7%	81.7%	81.8%	81.9%	81.9%	81.9%	81.9%	81.9%	81.9%
Connecticut	Females	50 - 54	79.3%	78.6%	78.7%	78.8%	78.8%	78.8%	78.8%	78.8%	78.8%	78.8%
Connecticut	Females	55 - 59	76.9%	74.9%	76.9%	80.3%	81.6%	81.6%	81.6%	81.6%	81.6%	81.6%
Connecticut	Females	60 - 64	62.3%	63.9%	65.8%	69.1%	70.4%	70.4%	70.4%	70.4%	70.4%	70.4%
Connecticut	Females	65+	15.8%	17.6%	19.5%	22.6%	23.9%	23.9%	23.9%	23.9%	23.9%	23.9%
Connecticut	Males	16 - 19	37.1%	38.0%	35.9%	32.5%	31.1%	31.1%	31.1%	31.1%	31.1%	31.1%
Connecticut	Males	20 - 24	78.3%	78.8%	77.3%	74.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%
Connecticut	Males	25 - 29	88.8%	90.6%	90.3%	90.0%	89.8%	89.8%	89.8%	89.8%	89.8%	89.8%
Connecticut	Males	30 - 34	92.1%	91.0%	90.8%	90.4%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%
Connecticut	Males	35 - 39	93.0%	94.0%	93.9%	93.7%	93.7%	93.7%	93.7%	93.7%	93.7%	93.7%
Connecticut	Males	40 - 44	93.4%	93.1%	93.1%	92.9%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%
Connecticut	Males	45 - 49	92.3%	91.7%	91.3%	90.8%	90.6%	90.6%	90.6%	90.6%	90.6%	90.6%

Connecticut	Males	50 - 54	88.2%	89.1%	88.7%	88.2%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%
Connecticut	Males	55 - 59	84.5%	83.9%	83.8%	83.7%	83.7%	83.7%	83.7%	83.7%	83.7%	83.7%
Connecticut	Males	60 - 64	68.6%	67.8%	69.1%	71.2%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%
Connecticut	Males	65+	26.4%	27.6%	28.9%	31.0%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%
Fairfield County	Females	16 - 19	36.8%	39.2%	36.5%	32.0%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%
Fairfield County	Females	20 - 24	77.2%	69.5%	68.7%	67.3%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Fairfield County	Females	25 - 29	78.8%	83.6%	83.3%	83.0%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%
Fairfield County	Females	30 - 34	72.4%	81.8%	81.5%	81.1%	81.0%	81.0%	81.0%	81.0%	81.0%	81.0%
Fairfield County	Females	35 - 39	73.8%	72.1%	71.6%	70.9%	70.6%	70.6%	70.6%	70.6%	70.6%	70.6%
Fairfield County	Females	40 - 44	69.7%	69.3%	68.8%	68.1%	67.9%	67.9%	67.9%	67.9%	67.9%	67.9%
Fairfield County	Females	45 - 49	79.4%	81.1%	81.2%	81.3%	81.3%	81.3%	81.3%	81.3%	81.3%	81.3%
Fairfield County	Females	50 - 54	77.8%	75.6%	75.7%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Fairfield County	Females	55 - 59	73.4%	74.5%	76.5%	79.8%	81.2%	81.2%	81.2%	81.2%	81.2%	81.2%
Fairfield County	Females	60 - 64	64.9%	64.2%	66.2%	69.5%	70.8%	70.8%	70.8%	70.8%	70.8%	70.8%
Fairfield County	Females	65+	16.1%	19.3%	21.3%	24.7%	26.1%	26.1%	26.1%	26.1%	26.1%	26.1%
Fairfield County	Males	16 - 19	32.0%	38.6%	36.5%	33.0%	31.6%	31.6%	31.6%	31.6%	31.6%	31.6%
Fairfield County	Males	20 - 24	79.1%	83.8%	82.3%	79.7%	78.6%	78.6%	78.6%	78.6%	78.6%	78.6%
Fairfield County	Males	25 - 29	88.6%	94.4%	94.2%	93.8%	93.7%	93.7%	93.7%	93.7%	93.7%	93.7%
Fairfield County	Males	30 - 34	90.2%	96.3%	96.1%	95.7%	95.6%	95.6%	95.6%	95.6%	95.6%	95.6%
Fairfield County	Males	35 - 39	95.0%	92.3%	92.2%	92.0%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%
Fairfield County	Males	40 - 44	93.4%	95.5%	95.4%	95.3%	95.2%	95.2%	95.2%	95.2%	95.2%	95.2%
Fairfield County	Males	45 - 49	92.9%	92.6%	92.3%	91.8%	91.6%	91.6%	91.6%	91.6%	91.6%	91.6%
Fairfield County	Males	50 - 54	89.8%	90.0%	89.6%	89.1%	88.9%	88.9%	88.9%	88.9%	88.9%	88.9%
Fairfield County	Males	55 - 59	87.5%	88.6%	88.5%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%
Fairfield County	Males	60 - 64	70.6%	69.3%	70.6%	72.8%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%
Fairfield County	Males	65+	30.0%	31.5%	32.9%	35.3%	36.3%	36.3%	36.3%	36.3%	36.3%	36.3%
Litchfield County	Females	16 - 19	39.3%	56.3%	52.4%	46.0%	43.4%	43.4%	43.4%	43.4%	43.4%	43.4%
Litchfield County	Females	20 - 24	77.2%	75.8%	74.9%	73.4%	72.8%	72.8%	72.8%	72.8%	72.8%	72.8%
Litchfield County	Females	25 - 29	79.9%	91.3%	91.0%	90.6%	90.4%	90.4%	90.4%	90.4%	90.4%	90.4%
Litchfield County	Females	30 - 34	89.0%	87.7%	87.5%	87.1%	86.9%	86.9%	86.9%	86.9%	86.9%	86.9%
Litchfield County	Females	35 - 39	86.2%	87.3%	86.8%	85.9%	85.6%	85.6%	85.6%	85.6%	85.6%	85.6%
Litchfield County	Females	40 - 44	86.8%	78.1%	77.6%	76.9%	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%
Litchfield County	Females	45 - 49	84.3%	90.2%	90.3%	90.4%	90.4%	90.4%	90.4%	90.4%	90.4%	90.4%
Litchfield County	Females	50 - 54	81.9%	81.1%	81.2%	81.3%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Litchfield County	Females	55 - 59	84.9%	79.6%	81.7%	85.3%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%
Litchfield County	Females	60 - 64	54.8%	68.5%	70.6%	74.1%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
Litchfield County	Females	65+	18.8%	22.6%	25.0%	29.0%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%
Litchfield County	Males	16 - 19	34.1%	56.2%	53.1%	48.0%	45.9%	45.9%	45.9%	45.9%	45.9%	45.9%
Litchfield County	Males	20 - 24	89.9%	83.0%	81.5%	78.9%	77.9%	77.9%	77.9%	77.9%	77.9%	77.9%
Litchfield County	Males	25 - 29	86.2%	93.7%	93.5%	93.1%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%
Litchfield County	Males	30 - 34	94.3%	98.3%	98.0%	97.7%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%
Litchfield County	Males	35 - 39	89.8%	99.0%	98.9%	98.8%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%
Litchfield County	Males	40 - 44	95.0%	91.6%	91.5%	91.3%	91.3%	91.3%	91.3%	91.3%	91.3%	91.3%
Litchfield County	Males	45 - 49	90.4%	94.2%	93.8%	93.3%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%
Litchfield County	Males	50 - 54	93.5%	86.4%	86.1%	85.6%	85.4%	85.4%	85.4%	85.4%	85.4%	85.4%
Litchfield County	Males	55 - 59	82.5%	85.2%	85.1%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Litchfield County	Males	60 - 64	60.3%	73.3%	74.7%	77.0%	77.9%	77.9%	77.9%	77.9%	77.9%	77.9%
Litchfield County	Males	65+	25.8%	29.2%	30.6%	32.8%	33.7%	33.7%	33.7%	33.7%	33.7%	33.7%
New Haven County	Females	16 - 19	41.0%	48.0%	44.7%	39.2%	37.0%	37.0%	37.0%	37.0%	37.0%	37.0%
New Haven County	Females	20 - 24	77.9%	79.5%	78.5%	76.9%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%

New Haven County	Females	25 - 29	81.0%	77.8%	77.6%	77.2%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%
New Haven County	Females	30 - 34	82.2%	77.5%	77.2%	76.9%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%
New Haven County	Females	35 - 39	84.3%	87.6%	87.1%	86.2%	85.8%	85.8%	85.8%	85.8%	85.8%	85.8%
New Haven County	Females	40 - 44	82.8%	83.6%	83.1%	82.2%	81.9%	81.9%	81.9%	81.9%	81.9%	81.9%
New Haven County	Females	45 - 49	83.2%	80.3%	80.4%	80.5%	80.5%	80.5%	80.5%	80.5%	80.5%	80.5%
New Haven County	Females	50 - 54	80.3%	81.4%	81.4%	81.5%	81.6%	81.6%	81.6%	81.6%	81.6%	81.6%
New Haven County	Females	55 - 59	78.2%	74.1%	76.1%	79.4%	80.7%	80.7%	80.7%	80.7%	80.7%	80.7%
New Haven County	Females	60 - 64	61.6%	62.3%	64.2%	67.5%	68.7%	68.7%	68.7%	68.7%	68.7%	68.7%
New Haven County	Females	65+	14.7%	14.9%	16.5%	19.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%
New Haven County	Males	16 - 19	42.8%	33.7%	31.8%	28.8%	27.5%	27.5%	27.5%	27.5%	27.5%	27.5%
New Haven County	Males	20 - 24	76.3%	73.8%	72.4%	70.1%	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%
New Haven County	Males	25 - 29	89.4%	86.7%	86.5%	86.2%	86.0%	86.0%	86.0%	86.0%	86.0%	86.0%
New Haven County	Males	30 - 34	93.7%	84.1%	83.9%	83.6%	83.4%	83.4%	83.4%	83.4%	83.4%	83.4%
New Haven County	Males	35 - 39	91.5%	95.1%	95.0%	94.9%	94.8%	94.8%	94.8%	94.8%	94.8%	94.8%
New Haven County	Males	40 - 44	93.1%	90.5%	90.4%	90.3%	90.2%	90.2%	90.2%	90.2%	90.2%	90.2%
New Haven County	Males	45 - 49	92.0%	89.9%	89.6%	89.0%	88.8%	88.8%	88.8%	88.8%	88.8%	88.8%
New Haven County	Males	50 - 54	85.1%	88.8%	88.5%	88.0%	87.7%	87.7%	87.7%	87.7%	87.7%	87.7%
New Haven County	Males	55 - 59	82.0%	78.9%	78.9%	78.8%	78.7%	78.7%	78.7%	78.7%	78.7%	78.7%
New Haven County	Males	60 - 64	68.4%	64.1%	65.3%	67.3%	68.1%	68.1%	68.1%	68.1%	68.1%	68.1%
New Haven County	Males	65+	22.9%	23.2%	24.3%	26.0%	26.8%	26.8%	26.8%	26.8%	26.8%	26.8%

End Notes

¹ The New Jersey Department of Labor test a number of different approaches to population forecasting but present the economic-demographic model results as their preferred projection series due to the greater consistency with corresponding employment model projection.

http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/lfproj_index.html

² Armstrong, J. Scott (2001). "Combining Forecasts," in *Principles of Forecasting: A Handbook for Researchers and Practitioners*, ed. J. Scott Armstrong, Kluwer Academic Publishers, p. 417-439.

³ **<https://www.census.gov/eos/www/naics/>**

⁴ For more information, see **<http://www.bls.gov/bls/empsitquickguide.htm>**

⁵ Includes nannies, house cleaners, and grounds-keepers

⁶ For a detailed comparison of the CES and CPS surveys, see:

http://www.bls.gov/web/empsit/ces_cps_trends.pdf

⁷ **<http://www.bls.gov/cew/home.htm>**

⁸ The preceding paragraph was compiled from parts of the following page:

<http://www.bls.gov/cew/cewover.htm>

⁹ Source: phone conversation with Elena Volovelskaya, New York City labor market analyst for NY Dept. of Labor

¹⁰ **<http://www.bls.gov/sae/home.htm>**

¹¹ **<http://www.bls.gov/sae/790faq2.htm#Ques3>**

¹² **<http://www.bls.gov/web/empsit/cestn.htm#NCE>**

¹³ **http://www.census.gov/acs/www/data_documentation/summary_file/**

¹⁴ Sorce: "A Compass for Understanding and Using American Community Survey Data, What Researchers Need to Know, Census Bureau, May 2009

<http://www.census.gov/acs/www/Downloads/handbooks/ACSResearch.pdf>

¹⁵ For more information on SAE's estimates of non-covered employment, see:

<http://www.bls.gov/web/empsit/cestn.htm#NCE>

¹⁶ Source: phone conversation with Elena Volovelskaya, New York City labor market analyst for NY Dept. of Labor

¹⁷ This employment comparison is not completely apples-to-apples: ACS counts primary jobs and misses those on-leave during the survey, whereas QCEW counts all jobs for multiple job-holders but misses some non-reporting employment. The point of this comparison is to demonstrate the magnitude of the headquartering bias, which stands independent of these definitional and scope issues.

¹⁸ The resulting ACS data still does not have an identical interpretation as SAE/QCEW. This is because SAE/QCEW counts all jobs, whereas ACS counts *primary* jobs – the self-reported “most important” job for those holding multiple jobs. However, because the ACS data was converted to a county share (county primary jobs / state primary jobs), this difference should not introduce much bias.

¹⁹ http://en.wikipedia.org/wiki/Iterative_proportional_fitting

²⁰ For counties where the 1-year sample was suppressed, ACS table values were estimated by allocating the sum of all 1-year suppressions to counties based on the 3-year sample (state by state).

²¹ Raw QCEW data was suppressed for select industry-county combinations. Iterative proportional fitting was used to fill in these suppressions.

²² See <http://www.bls.gov/opub/mlr/2013/article/multiple-jobholding-in-states-in-2012-1.htm>

²³ See [http://www.eia.gov/forecasts/aeo/nems/documentation/macroeconomic/pdf/m065\(2013\).pdf](http://www.eia.gov/forecasts/aeo/nems/documentation/macroeconomic/pdf/m065(2013).pdf)

²⁴ Each quarter, IHS-Global Insight publishes several forecasts: Trend, Optimistic, Pessimistic, and Cyclical. Only the Trend forecast was used in the methodology described here.

²⁵ Source: Mehra, Sunayana (2012). Moody’s Analytics Global National Forecast with Alternative Scenarios: Model Methodology. Moody’s Analytics.

²⁶ Source: <http://www.bls.gov/opub/mlr/2013/article/the-u-s-economy-to-2022-settling-into-a-new-normal.htm>

²⁷ <http://www.bls.gov/opub/mlr/2013/article/industry-employment-and-output-projections-to-2022.htm>

²⁸ S. K. Smith, J. Tayman , D. A. Swanson, (2013). *A Practitioners Guide to State and Local Population Projections*,p88, Springer

²⁹ S. K. Smith, J. Tayman , D. A. Swanson, (2013). *A Practitioners Guide to State and Local Population Projections*,p89, Springer

³⁰ S. K. Smith, J. Tayman , D. A. Swanson, (2013). *A Practitioners Guide to State and Local Population Projections*,p61, Springer

³¹ Age-specific fertility rates are based on five year age groups beginning with 15-19 year olds and ending with 45-49 year olds. All these age groups represent the “child-bearing” population. In order to calculate the actual rates, the number of births an age group produced is divided by that age group’s female population. Births were based on a three year average (2008, 2009, and 2010) so that the yearly estimate of births is not subject to any one-year anomalies. All the age-specific fertility rates are multiplied by five to obtain a rate for the five year projection interval.

These age-specific rates can be summed to produce an overall measure of fertility for women in each borough, called the Total Fertility Rate (TFR). Adjusting the TFR permits a change in overall rates for women in all age groups (moving them up or down, but maintaining the overall pattern by age), while adjustments to the age-specific fertility rates permits an alteration of fertility levels for particular age groups.

³² For example, despite the post baby-boom decline in rates, births did increase in the 1980s and peaked in 1990 at 135,000. This was still well below the level achieved in 1961, when the number of births exceeded 168,000.

³³ Both the logarithmic and linear equations were fitted to the annual series of historical fertility rates (1990-2010) holding each year as in that interval as the independent variable. To ensure the moderating effect of the logarithmic projection, 1990 was held as year 1 of the analysis period, and 2050 (the final projection year) as year 61 (i.e year 1 plus 60 years between 1990 and 2050). If the logarithmic equation was fitted without re-setting 1990 and year 1, the resulting equation would have ultimately produced a result very similar to the linear projection

³⁴ F. C. Bell, M. L. Miller, (2005). *Life Tables for the United States Social Security Area 1900-2100*, Social Security Administration Pub No. 11-11536

³⁵ A number of comparable studies of regional population growth relied on a single inter-census period (2000-2010) for the derivation of net migration rates.

³⁶ Two different approaches were tested to represent the 1995 and 2005 enumerated population statistics; intercensal estimates from the US Census, and a straight line interpolations of the decennial census counts. Based on a review of the resulting outputs of both approaches at the subregional level, the intercensal estimates were found to be more appropriate due to a lesser degree of volatility of the resulting age/gender-specific migration rates across successive age cohorts.

³⁷ K. Smith, J. Tayman , D. A. Swanson, (2013). *A Practitioners Guide to State and Local Population Projections*, p226, Springer

³⁸ A headship rate is the ratio of household-heads (self-identified classification by census respondents) and the corresponding household population.